

**'The Real Beside the Real' –
The Laboratory Exhibition and the Experimental Production of
Architecture**

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ABSTRACT

Peter Smithson argued that Renaissance architects used the ephemeral stage architecture for courtly masques and temporary festivals to exhibit and experiment with the new style; they were testing out the 'Real before the Real'. Architects have ever since, often in collaboration with other producers of the built environment, used the public exhibition of architecture to experiment with new spatial, technological or programmatic propositions. In fact, the architectural exhibition has been, and still is, the locale to test new forms of the production of architecture itself. In that respect, the architectural exhibition can be an experimental praxis and has a transformative and progressive role in the development of architecture. It is a praxis that is situated not only 'before the real' but is in fact concurrent part of the production of architecture. It is the 'Real beside the Real'. The thesis calls this praxis the Laboratory Exhibition.

The thesis explores the general preconditions of this Laboratory Exhibition and explores the discrete historical development towards this exhibition type. The emphasis is put here on specific historical forms and locale that were created or appropriated for the experimental production and exhibition of architecture, ranging from very intimate or private spaces, such as the 15th century *studiolo*, to large-scale spectacles, such as the 19th century world expositions. The thesis argues here that their original intrinsic qualities as places of architectural production and experimentation continue to be of relevance for a contemporary exhibition praxis. This is substantiated through the analysis of five contemporary case studies of Laboratory Exhibitions, ranging from a small-scale, participatory exhibition to a building exhibition operating on a city scale. The thesis thus produces a triangular exploration of the Laboratory Exhibition including theoretical foundation, historical development and contemporary praxis.

The original contribution of this thesis is threefold. Firstly, it identifies and defines the key characteristics of an experimental architectural exhibition praxis that the thesis coins the Laboratory Exhibition. Secondly, the thesis argues, in contrast to most architectural histories, that this praxis is of a transhistorical nature and significance which predates the 19th century and Modernism. Finally, the thesis maintains that the Laboratory Exhibition is an indispensable part of the contemporary architectural praxis in which and through which architecture can be progressively transformed. In that respect, the thesis' significance lies in the contribution to a crucial but largely absent discourse on those exhibitions that can inform the development of architecture.

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all those who have worked with me on exhibitions and have helped to inform and produce a body of work and knowledge which found its way into this thesis. A special thanks goes here to Verena von Gagern for working with me on *Architectural*, setting my curatorial praxis into motion and all members of G.L.A.S. for the work we have done collaboratively on *Urban Cabaret*.

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PROLOGUE

This thesis originated from a personal and experiential engagement with architectural exhibitions that had started almost twenty years ago and comes here to a full circle. This exploration led me from passive observation to an experimental production of architectural exhibitions and to a theoretical reflection upon these exhibitions and their production, ultimately enabling the consolidation of my own critical praxis. In parts, this thesis delivers thus a personally motivated survey and, to a degree, the boundaries between subject and object of this study are deliberately and consciously crossed. A number of these exhibitions, experienced or produced by myself, find their way into this thesis¹. Similarly, the thesis is informed through interviews with a number of architects or curators who I either encountered or worked during that period.

The aforementioned personal exploration began in the mid-eighties before actually starting my architectural studies. In our neighbourhood in Hamburg, the *Galerie für Kunst und Architektur*, run by Ulla von Klot-Heydenfeldt, showed, beside artists that had a clear affinity to spatial interventions, exhibitions by architects such as Will Alsop², Zaha Hadid, Peter Cook and Christine Hawley or Coop Himmelblau. A very first step towards a reflection of such exhibitions resulted then from photographing the Alsop exhibition, commissioned by Klot-Heydenfeldt. But most of all, these exhibitions acted as an early eye-opener for what architecture could be – not only brick and mortar, but exciting forms and programmes vigorously sketched on small paper or colourfully painted on large canvases.

Then, from 1988/89, in the first years of my architectural studies in Berlin, the *Aedes* gallery, founded in 1980 by Kristin Feireiss as the first private architecture gallery in Europe, provided a stimulating addition to our institutional curriculum³. As undergraduate students we saw exhibitions by architects such as John Hejduk, Aldo Rossi, Peter Eisenman, O.M. Ungers, Daniel Libeskind, Morphosis or Lebbeus Woods. Even more inspiring were the numerous exhibitions of student work, master classes or studios run by the likes of Hans Kollhoff at the ETH, Giorgio Grassi at the Milan Politecnico, Hejduk at the Cooper Union, or Raoul Bunschoten at the AA. Then, in 1992, we, a group of students from the Technical University, had our first own

¹ These exhibitions are dealt with in PART III of this thesis which puts my own curatorial praxis as one example of a contemporary exhibition praxis into a theoretical and historical context that is explored in PART I and PART II.

² For interview transcripts with Will Alsop see APPENDIX A

³ For interview transcript with Kristin Feireiss see APPENDIX A

exhibition in the Aedes Gallery. *Well-Tempered Architecture* showed the results of an international design workshop that we had organized in order to develop innovative energy and environment conscious buildings⁴.

But the city of Berlin itself acted in these early years as a gigantic architecture exhibition. The numerous 1920s *Siedlungen* by Bruno Taut, buildings by Mies van der Rohe, Hans Scharoun, Erich Mendelson, the *Interbau* of 1957 in the *Hansa Viertel* with housing by Oscar Niemeyer, Walter Gropius, or Alvar Aalto, as well as the just finished buildings of the IBA (*Internationale Bauausstellung Berlin 1987*) were the real-scale exhibits of a 'show' on modern architecture⁵. While young architects of the 18th century were travelling to Italy and Greece on their Grand Tour to study the architecture of Antiquity, we could follow Grassi's dictum '*Guardiamo per imparare come si fa*' on our 'curated' tours through the city to study the architecture of Modernity⁶.

The decisive step towards my ongoing engagement with architectural exhibitions and the formation of my own curatorial praxis happened then in 1993/4 with the start of a long-lasting collaboration with the late Otto Steidle. The first joint project – together with his wife Verena von Gagern – was the book and exhibition *Architectural* from which a whole series of monographic exhibitions on Steidle's work should evolve over a course of seven years⁷. It was here in particular the experimental curation of existing media of architectural production from the Steidle studio in combination with other artistic languages and media, namely photography and colour, but also the engagement with very different architectural institutions and their varying spaces that offered me a sort of test-bed for curatorial techniques and the mediation of architecture through exhibitions.

This 'test-bed' extended into an educational context when I was teaching at the Academy of Fine Arts in Munich from 1997 to 2000. In collaboration with students of the post-graduate course in architecture I was able to experiment with new and partly

⁴ AEDES and OSWALT, Philipp (eds.) (1992). *Wohltemperierte Architektur / Well-tempered Architecture*. Aedes Galerie für Architektur: Berlin

Since then I did two more exhibitions at Aedes, one with Otto Steidle in 1997 and one with G.L.A.S. in 2003.

⁵ For IBA see also PART III, Chapter 8

⁶ GRASSI, Giorgio (1988). *Architettura lingua morta - Architecture dead language*.

Electa/Rizzoli: Milan/New York. p23 [We are looking in order to see how to do.]

One can argue that the 'curated' walk through city (or even country) equates in some respect a curated exhibition.

⁷ STEIDLE, Otto and VON GAGERN, Verena (1994). *Architectural*. Nazraeli Press: Munich
Exhibitions in Munich, Salzburg, Venice, Paris, Berlin, Dresden and Augsburg. For *Architectural* see also PART III, Chapter 9

participatory forms of exhibiting architecture, using the exhibition as the actual place of producing architecture. These exhibitions would also act to facilitate a wider architectural debate, either dealing with very topical and local issues as in the case of *Perspektive Domagk* (supporting a artist community on a former barracks site threatened by new housing developments) or very generic issues as in the case of *Traumhaus 2000* (examining the private 'dream home' at the turn of the millennium)⁸.

It is this notion of producing and testing architecture or issues related to the built environment through the means of mediation, and exhibitions being one of them, that should further, from 2001 onwards, be central to my work within the cooperative G.L.A.S. (Glasgow Letters on Architecture and Space Ltd.). Two exhibitions in particular, *Urban Cabaret*⁹ on the streets of Glasgow and *Unser Berlin/Our Berlin* in the Aedes East Pavilion in Berlin, tested the notion of extending the understanding of architecture on the one hand and, on the other hand, engaged an otherwise disenfranchised audience in the production of architecture by utilising extra-institutional or unconventional spaces for the exhibition.

Unser Berlin and the work with G.L.A.S. coincided with the beginning of the study for this thesis. While G.L.A.S.' work was generally concerned with the production of 'multi-media critical works and design ideas that promote a radical and social rethinking of how we make and experience buildings and cities'¹⁰ my own interest in this field raised the question how such an approach could be translated into the work on and with architectural exhibitions. More fundamentally, I came to a point where I had to ask: Why do we, as architects, make exhibitions at all? Or, on a more personal level: Why had I been doing architecture exhibitions over the past ten years? Had there been a common thread, a common distinguishable approach, or a discernible praxis that tied all these varied exhibitions together? And if so – even if many things might have been done unconsciously or without deeper reflection – what were the reference points to a current exhibition praxis by other architects or curators and, maybe more importantly, to historical precedents and developments that could have informed such a praxis?

But while this thesis took a very personal starting point and will also inform my own exhibition praxis, it ultimately aims to provide useful knowledge for others working in this field. It is the declared aim of this thesis to put the personal motivation and agenda into general context or framework and to make this personal praxis relevant for a wider

⁸ For *Traumhaus 2000* see also PART III, Chapter 10

⁹ For *Urban Cabaret* see also PART III, Chapter 12

¹⁰ G.L.A.S. (2001). 'Manifesto' in: *Glaspaper 01*. September 2001. p3

academic and professional audience by offering a theoretical and historical exploration of the architectural exhibition as it does not exist to date.

Architecture exhibitions – an underexplored research topic

Architecture exhibitions are today – beside the publications in journals or books, the presence on the web, and the increasing coverage in film and television – a major form of presenting and mediating architecture to a professional and general audience. Yet they are also, as this thesis will argue, an important locale in which architecture is actually produced and experimented with.

While architectural exhibitions are not a modern phenomenon, as this thesis will explain, their sheer numbers, their differentiation of types, as well as the amount of dedicated or appropriated spaces and institutions in which they are held has exponentially increased over the last fifteen years. The *International Confederation of Architecture Museums* (ICAM), counts to date more than 140 institutional members¹¹, all of which are exhibiting architecture on a more or less continuous basis. Additionally, architectural exhibitions are held in the exhibition spaces of professional bodies, in private architecture galleries, in civic, regional or national architecture centres¹², in municipal planning departments, at architecture schools, in temporarily appropriated spaces, in art museum, at trade fairs and conferences. They amount to an almost uncountable number of public presentations and mediations of architecture and related cultural, technical, social, economic, or political issues at any given time.

Contrasting with this vast amount of architectural exhibitions – and their accompanying publications such as press releases, catalogues or exhibition reviews in professional journals and occasionally the general press – is the very limited amount of publications that deal with a theoretical investigation, critique, and history of the architectural exhibition¹³.

While many publications of a general architectural history include with more or less extensive side-remarks historic architectural exhibitions, there exist no coherent history of exhibiting architecture that traces back to its earliest beginnings. And those accounts

¹¹ <http://www.icam-web.org/memberlist.php> [Last accessed: 16.06.2008]

¹² In the UK alone, the number of regional architecture centres associated in the Architecture Centre Network has almost doubled from 2005 to 2008 from 14 centres to 23 centres. <http://www.architecturecentre.net/directory.asp#listings> [last accessed: 16.06.2008]

¹³ This view is supported by several of the interviewees. Stuart MacDonald, for instance, asserts that: "Architecture Exhibitions' is a very young and immature field and very few people have been researching this topic'. Interview conducted with the author, 30.07.2005

that exist only start with or around the *Great Exposition* in London in 1851. Consequently, their focus is on the exhibition as a big event or a spectacle and here the world expositions in particular. These expositions undeniably play a decisive part in the development of architectural exhibitions and the way architecture is presented¹⁴. Yet the concentration on these events neglects important other traditions and approaches of exhibiting architecture.

There are further those publications that cover very specific or iconic exhibitions. Examples of such exhibitions would be for instance the *Weißenhofsiedlung* in Stuttgart in 1927, the 1932 exhibition *International Style* at the MOMA, or the 1970 *Osaka World Exposition*¹⁵. Other publications are concerned with specific types of exhibitions and here again the world expositions in particular¹⁶. Additionally, many exhibition catalogues include some general explorations on the nature and history of architectural exhibitions. There are, however, almost no publications that deal with the architectural exhibition per se. This is a point the Jean-Louis Cohen, former director of the *Institut français d'architecture* and the *Cité d'architecture* in Paris, supports when he says: 'I think there is a sort of monographic fabric [on architecture exhibitions] emerging. The question is perhaps to try to shape a more collective project'¹⁷. In one of the few existing exceptions, Kristin Feireiss makes a similar statement when she explains that one of the incentives behind publishing *The Art of Architecture Exhibitions*¹⁸ was that 'strangely enough, we could not find one single recent book on the subject of architecture exhibitions'¹⁹.

¹⁴ See here also Chapter 7 in which this thesis deals specifically with the world expositions as Laboratory in 'real-scale'.

¹⁵ In the case of the *International Style* exhibition Hitchcock and Johnson's seminal catalogue, should become almost more important than the actual exhibition: JOHNSON, Philip and HITCHCOCK, Henry Russell (1932). *The International Style: Architecture Since 1922*. W. W. Norton/Museum of Modern Art: New York
Regarding the *Weißenhofsiedlung* see for instance: KIRSCH, Karin (1987). *Die Weißenhofsiedlung*. DVA: Stuttgart

¹⁶ See for instance: ALLWOOD, John (1977). *The Great Exhibitions*. Studio Vista: London
BEUTLER, Christian (1973). *Weltausstellungen im 19. Jahrhundert* (Staatliches Museum für Angewandte Kunst: Munich
FRIEBE, Wolfgang (1983). *Architektur der Weltausstellungen: 1851–1970*. Kohlhammer: Stuttgart
LUCKHURST, Kenneth (1951). *The Story of Exhibitions*. Studio Publications: London
MATTIE, Erik (1998). *World's Fairs*. V+K Publishing: Balricum

¹⁷ Interview with Jean-Louis Cohen, conducted 17.08.2005. For full transcript see APPENDIX A

¹⁸ FEIREISS, Kristin (ed.) (2001). *The Art of Architecture Exhibitions*. Nai Publishers: Rotterdam. The book contains a series of general essays about architectural exhibitions as well as a detailed exploration about exhibitions under Feireiss' directorship at the NAI.

¹⁹ Ibid. p14

The discrepancy between the past and present production of architectural exhibitions on the one hand and the lack of academic research or critical acclaim of this important part of the architectural praxis on the other hand could be a research topic in its own right. However, it is not of primary concern for this thesis. What the aforementioned discrepancy nevertheless highlights is the principal need and opportunity for an investigation into the nature, history and contemporary meaning of architectural exhibitions in the first place.

Field of research – The 'Laboratory Exhibition'

Architectural exhibitions can be analyzed and questioned in multiple ways. One could make distinctions according to exhibitions in different historical periods or different countries, according to their content and the media used to present and represent architecture, according to the type of venue or institution the exhibitions is held in or organized by, or according to specific audience groups of exhibitions. These categories would address the questions '*When?*', '*Where?*', '*What?*', '*How?*', '*Who?*' and '*For Whom?*'. However, a study of a 'collective project', as Jean-Louis Cohen calls for, would first and foremost have to ask the most fundamental question about the reason of or for architecture exhibitions. It is the question for the function of the architecture exhibition; essentially, it is the question for the '*Why?*'

Why do we make architecture exhibitions? '*Why?*' is here the paramount question regarding the actual function of the architecture exhibition and the ideology behind its production. Both are considered by the author as the foremost aspects regarding a critical analysis of the production and perception of architectural exhibitions. And it is this very question that determines the field of research for the thesis and the approach to its topic.²⁰ All other above mentioned aspects and questions are in this respect secondary and follow from this primary question.

However, even if one concentrates on the function of the architectural exhibition the field of research is still wide open. Specific exhibition types will also have very specific (yet not necessarily a single or mutually exclusive) functions. The question about the function is hereby dependent on the various agents involved in the production of architecture exhibitions. This thesis is aware of all these various functions and their respective forms. It also makes cross-references between architectural exhibitions that have differing functions. Yet it decisively focuses on one particular exhibition type that

²⁰ Regarding the understanding of 'ideology' in this thesis and the relation between ideology and architecture exhibitions see also p16.

is driven by one particular group of agents. The thesis calls this type of exhibition the 'Laboratory Exhibition'. Broadly speaking, the function of the Laboratory Exhibition is the experimentation with architecture. Its agents or main subjects are architects²¹.

The focus on this specific type of exhibition within this thesis necessarily either neglects other prevalent forms of exhibitions or it refers to them only in relation to the Laboratory Exhibition. Three of these exhibition types that have each specific functions and which are driven by different agents could be identified as the exhibition as 'marketplace', the exhibition as publicly displayed 'archive', and the exhibition as an 'educational tool'.

From the perspective of the architect with a commercial practice a key function of any exhibition of his or her work is the promotion of the architect's intellectual, artistic or even entrepreneurial skill or capability²². The exhibition acts here as a form of 'marketplace'. Yet, in contrast to a traditional marketplace, the purpose of the exhibition is not necessarily the promotion of the actually shown object but to represent and hence promote the producing subject – the architect (or, in some instances, client, investor, or construction company). These exhibitions will predominantly take place in private or professional galleries and normally present one or several latest projects by the architectural practice²³. This category would also include exhibitions by local authorities that present current architectural and urban developments in order to win over public approval for a project²⁴. One can assert that the 'marketplace' exhibition exists since architects had to compete for patronage and commissions from the 15th century onwards [See here in particular Chapter 2 and Chapter 4].

The exhibition as a publicly displayed 'archive' is a type of exhibition that is less used by practising architects but favoured both by architectural museums and by most

²¹ See here also 'Provisional definition of the Laboratory Exhibition', p.11

²² In that respect, exhibitions that fall into one of the other categories (Laboratory, Archive, or Educational Tool) can also have promotional marketplace aspects if these exhibitions either feature work by presently practising architects or are in fact done by these architects.

²³ They find their extreme at trade fairs or events such as the annual MIPIM fair at Cannes in which cities, developers, but also architectural practices present most recent developments in order to attract further investment and present themselves on the real-estate market (see www.mipim.com).

²⁴ A sub-category would here be the exhibition of architectural exhibitions. One could argue that the exhibition of usually not only the winning scheme but of all participating or at least short-listed entries serves also the purpose to solicit a wider public approval for the jury decision and thus serves the legitimisation of the institutional body that conducted the competition. For a comprehensive survey of competitions and their exhibitions see: BECKER, Heidede (2002): *Stadtbaukultur – Modelle, Workshops, Wettbewerbe. Verfahren der Verständigung über die Gestaltung der Stadt*. Band 88. DIFU: Stuttgart/Berlin/Cologne

scholarly or academic curators. An exception to this would be the 'great retrospective' of, still practising, architects and their oeuvre that, although normally curated by an independent or institutional curator, are also driven by the architects themselves²⁵. 'Archive' exhibitions have their main function in the presentation of existing architecture, established knowledge of architecture and the mediation of cultural and/or ideological values related to architecture²⁶. While they can contain material that is specifically produced for the exhibition, and that is in this respect "new material", they usually do not deal with a "new" architecture that is projecting into an immediate or further future. Their quality lies in reflection not projection of architecture and one can thus described this kind of exhibition as reflective exhibition. The 'archive' exhibition is again a type of exhibition that dates back as far as the 15th century when individuals and institutional bodies started to collect, amongst many other things, architectural media and artefacts [See here in particular Chapter 4 – Exhibiting Architecture – Collections and the exhibition of architecture].

The architectural exhibition as 'educational tool' is an exhibition type that is today predominantly promoted by publicly funded architecture centres that have a decisively political aim to mediate architecture to a mostly unprofessional or lay audience. The aim is here not so much to present any specific architectural objects but rather to present generic issues relating to architecture and the built environment²⁷. The exhibition as educational tool is a form of exhibition that got its main impetus during the Enlightenment and has ever since been a medium to inform about modernisations and progressive developments in architecture. However, it is also very susceptible to propaganda and can and has been ideologically (mis-)used to indoctrinate its audience with a particular view on architecture and the built environment. Furthermore, there is often an overlap here between the exhibition as 'educational' tool and the 'archive' exhibition as much as a specific collection, in itself an archive, can be used to educate its audience. A prime example here would be the collections shown in the sculpture courts of art academies where students would study and copy historic examples for their own work [See here also Chapter 5 – Places of Architectural Production –

²⁵ Some of the more recent and prominent exhibitions of this particular type would be Herzog & DeMeuron's exhibition *No.250* that was shown at the CCA in Montreal, the Schaulager in Basel, the Tate Modern in London; Daniel Libeskind's *Space of Encounter* at the Barbican Art Gallery; or Zaha Hadid's *Architecture and Design* at the Design Museum London.

²⁶ The word archive originates from the Greek terms *αρχειον* signifying a magisterial residence or public office, *αρκη* signifying government, or *αρκηειν* signifying to rule. This underlines the ideological role of the archive exhibition to portray and support an officially approved and controlled representation of its subject matter.

²⁷ *The Building Exploratory*, founded in 1996 [www.buildingexploratory.org.uk] is here a prime example of such an institution in the UK.

While all these three exhibition types - the 'marketplace', the 'archive', and the 'educational tool' - have their relevance within a more comprehensive, 'collective project' about architecture exhibitions or would present topics worthy of an independent study they are not dealt with in extensive detail within this thesis. They only feature in this thesis through their direct or indirect influence on and relation to the Laboratory Exhibition.

The thesis is here least concerned with the role of the architectural exhibition as a 'marketplace' or a promotional device. While the 'marketplace' exhibition has undoubtedly its necessity in the economical advancement of architectural practices the author and this thesis assume that this form is of little relevance to the advancement of architecture as an intellectual and artistic discipline as it is most likely not used to experiment with architecture. The only testing aspect that one can ascribe to this form of architectural exhibition is that of testing an architectural proposition for its market value or for its public acceptance. It is therefore of little relevance for this thesis.

The thesis is also only peripherally interested in the 'archive' exhibition or the exhibition as a place for reflective presentation of a, mostly historical, architectural oeuvre. However, the thesis will show that through the curatorial process the 'archive' exhibition is able to produce a new understanding of an existing architecture and thus ultimately form part of its (re-)production. As such the 'archive exhibition' incorporates an experimental aspect in which the curator or producer of the exhibition can test a hypothesis that is manifested in the material selection and arrangement of the exhibits as well the ideological context in which they are presented. The thesis speaks here of a secondary production process of architecture. Yet, the 'archive' exhibition can only indirectly contribute to a progressive development of contemporary architecture²⁸.

Similar to the 'archive' exhibition, the exhibition as 'educational tool' is only of relevance here where it contributes to the development of the Laboratory Exhibition as a place of architectural production [See Chapter 5]. While this form of exhibition is of considerable importance to further the general and public discourse about architecture it is usually not used by architects to actually produce and experiment with architecture and can thus only indirectly influence the development of architecture.

²⁸ For an extended explanation regarding the secondary production of architecture through the process of mediation and perception see also PART I, Chapter 4

The overriding interest of this thesis lies precisely in two functions of the architecture exhibition that are not covered through the above-mentioned three exhibition types. These functions are the experimentation with architecture through exhibitions and consequently the contribution of these exhibitions to a progressive development of architecture²⁹. As the thesis will show, it is these two functions that are of paramount importance in the Laboratory Exhibition. And it is within these functions that the thesis surmises the most potent answers to the question '*Why do we make architecture exhibitions?*'³⁰. It is hereby the hypothesis of this thesis that architects have developed, in parallel with the historical development of the discipline, the Laboratory Exhibition as a specific form of the architectural exhibition in order to experiment, develop and test emerging architectural ideas. Furthermore, and in contrast to Peter Smithson's argument that architects of the Renaissance used the ephemeral stage architecture for courtly masques and temporary festivals as a 'Real before the Real'³¹ in order to exhibit and experiment with the new style, the thesis wants to maintain that this experimental exhibition praxis is in fact concurrent part of the production of architecture. It is, to paraphrase Peter Smithson, the 'Real beside the Real'.

The Laboratory – metaphor, concept, praxis

The term 'laboratory' in relation to the above-described exhibition type has been chosen as it most poignantly and evocatively describes the experimental character of the architectural exhibitions investigated in this thesis. Peter Smithson's distinction between architectural 'exhibitions of reflection' and 'exhibitions of emergence'³² was of

²⁹ It can be argued that exhibitions could potentially also be used to experiment with reactionary and regressive forms of architecture. However, the thesis is not interested in such ideologically driven perversions of the very notion of experimentation as an enlightening praxis.

³⁰ 'We' refers here to the producers of architecture – '*architects*'. The term 'architect' is used here and throughout the thesis (unless stated otherwise), not in its limiting legalistic understanding of a person being registered with a professional body (such as ARB in the UK) but as someone engaged in the intellectual and material production of architecture. See also PART I – Chapter 2 'The Producers of Architecture' that will specifically argue for an "extension" of the architect beyond any regimented definition to include all those that are involved in the production of architecture (not buildings!).

³¹ SMITHSON, Peter (1982). 'The Masque and the Exhibition: Stages toward the Real'. In: DI CARLO, Giancarlo (ed.) (1982). *Language of Architecture: Lectures, seminars, and projects. International Laboratory of Architecture and Urban Design, Urbino, 1981* Sansoni: Florence. pp62-67

³² SMITHSON, Peter (1997). 'Conglomerate Ordering – Restaging the Possible' in: WEBSTER, Helena (ed.). *Modernism without Rhetoric – Essays on the work of Alison and Peter Smithson*. Academy Editions: London. p186/187.

'It would seem that exhibitions made spontaneously at the time when the idea were emergent, unconsciously configure a state of mind. The exhibitions we are currently involved with are of a different sort, they are conscious acts of interpretation by others – not exhibitions of emergence but exhibitions of reflection. I am talking really about two parts of the mind: with an exhibition of

influence in the development of the concept of the Laboratory Exhibition as followed by this thesis. While Smithson regards the former as the 'intellectual interpretation' of an existing architecture made by others, he proposes that the latter is a type of exhibition conceived and *needed* by the architect to 'unconsciously configure a state of mind' leading towards a future architecture. The 'exhibition of emergence' could therefore be described as a testing ground for the architect that is a necessary part of the architectural praxis. It is thus in accordance with an important aspect of the Laboratory Exhibition as it is examined in this thesis.

Yet, in order to examine the historical development of the Laboratory Exhibition within the general context of the architectural exhibition as well as for the analysis of a contemporary praxis of the Laboratory Exhibition has been necessary to define the term 'Laboratory Exhibition' for this thesis. The term shall therefore be established here in relation to its general dictionary definitions, in regard of its contemporary relevance as well as in distinction to the contemporary use of the term.

The English term 'laboratory' derives from the Medieval Latin word '*Laboratorium*' that has its root in the Latin verb '*laborare*' (to labour). A *laboratorium* was hence signifying a workspace or workshop for artist, scientists and alchemists³³. The more specific sense of the term signifying a room or space that is used to conduct scientific experiments and to produce, process and store chemical substances dates back to the 17th century. It is worth noting, that, historically, the professional boundaries between those in the field of science and those in the field of the Arts were less articulated as they should later become. An artist studio or workshop was, until the 17th century, also the place where paint, pigments, and varnishes would be produced and was thus also a laboratory³⁴. From the 17th century and up until today, the term 'laboratory' would further be used in a figurative or metaphorical way. Examples include here 'Laboratory

emergence you are working blindly along the lines of 'this is what seems to be needed to be done'; exhibitions of interpretation are intellectual'.

³³ The Latin term found its way into almost every European language; French: *Laboratoire*, Italian/Spanish: *Laboratorio*, German: *Labor* (Laboratorium), Dutch: *Laboratorium*. This proved advantageous for the research when collecting and comparing material from different cultural backgrounds.

³⁴ See also WILLIAMS, Raymond (1976). *Keywords: a vocabulary of culture and society*. Fontana: London. p41

Williams explains that the term 'Art' was used until the late 17th Century for 'matters as various as mathematics, medicine and angling' and an artist was to describe any skilled person. He further writes that 'until the 18th Century most sciences were arts' and that the modern distinction between the two 'dates effectively from the mC19'.

of Man; Laboratory of the Mind; Laboratory of Life; Laboratory of the Bourgeois World; Laboratory of Modernity; Laboratory of the Middle East"³⁵.

The combination of this metaphorical use and the overlap between science, research and the arts becomes apparent again in the increasing occurrences of the term 'laboratory' in the field of the arts as well architecture as it can be witnessed over the past ten to fifteen years. The usage occurs here in three different forms: a) within the name of an (architectural or art) practice or institution; b) in the title of exhibitions of art and architecture; and c) in the academic and critical acclaim of cultural phenomena, periods, or events including exhibitions.

a) Architectural and art practices using the term, or parts thereof, include: *Lab[au]* – *Laboratory for architecture and urbanism*, in Brussels; *RaumLabor* in Berlin; *LabPlace* in Istanbul, *Stalker – Laboratorio d'Arte Urbana* in Rome; *Lab Architecture Studio* (Donald Bates), *arclab*, *Art_Lab Architects*, or *Spacelabuk*, all in London. One of the earliest architectural institutions using the term was probably the *ILAU – International Laboratory of Architecture and Urbanism* founded and directed by Giancarlo De Carlo in Urbino. Other institutes include the *Berlage Institute – Postgraduate laboratory of architecture* in Amsterdam; *LIA – Labor für Integrative Architektur* (Finn Geipel) at the Technical University Berlin; *C-Lab Columbia University* in New York; the *Creative Lab* at the CCA in Montreal; or the *DLR – Design Research Laboratory* at the AA in London.

b) Exhibitions using the term 'laboratory' fall in two different categories. The first would be that of exhibitions about laboratory periods, movements, or practices, not necessarily being laboratories in their own right. Exhibitions using the term 'laboratory' in this way in recent years include: *A Laboratory of Modernity: Image and Society in the Weimar Republic* at the Harvard Art Museum in 1998; *Davaj! Russian Art Now - Aus dem Laboratorium der freien Künste in Russland* at the MAK in Vienna in 2002; or *Zaha Hadid Laboratory* at the Yale School of Architecture in 2002. The other category encompasses exhibitions that try – to whatever extent – to incorporate the experimental aspect of the laboratory into the exhibition. These include: *Laboratorium*, an art exhibition curated Hans-Ulrich Obrist and Barbara van der Linden at the Museum of Photography in Antwerp in 1999; *Greg Lynn / Hani Rashid: Architectural Laboratories with Columbia University and UCLA* at the 7th Venice Architecture

³⁵ *The Oxford English Dictionary* mentions a passage from Henry Power *Experimental Philosophy* (1664) "The Soul (like an excellent Chymist) in the internal Laboratory of Man". John Henry Newman is quoted with "A notion neatly turned out of the laboratory of the mind" from his 1870 *Grammar of Assent*.

Biennale in 2000; *Laboratories – Six young architectural firms in the CCA galleries* at the CCA in Montreal in 2002; or the *ArchiLab* conferences and exhibitions at the FRAC centre in Orléans in 1999, 2000, 2001, 2002, and 2004.

c) Several scholars have used the term 'laboratory' in relation to a specific historic period when describing the cultural, social, and political experiments of the first decades of the 20th century. Karl Schlögel calls the time between 1909 and 1921 in St. Petersburg the 'Laboratory of Modernity'³⁶. Andrei Nacov describes with the 'Laboratory Period' of Russian Constructivism the two years between 1919 and 1921³⁷. In relation to its cultural achievements the Weimar Republic in Germany has similarly been called a 'laboratory period'³⁸. In relation to our subject, exhibitions, one can note here El Lissitzky's *Proun-Room* from 1927 at the *Niedersächsische Landesgalerie* that Sigfried Giedion called a 'research laboratory of modern art'³⁹. Mary-Anne Staniszewski writes of the 'Laboratory Period' at the Museum of Modern Art in New York between 1929 and 1970, in which the *MoMA* developed and applied new ways of presenting art, design and architecture⁴⁰. Tobias Wall describes the development of the contemporary museum 'from the archive to the laboratory' [author's translation] in his book *Das Unmögliche Museum*⁴¹. In recent years it has been first and foremost the curator and critic Hans-Ulrich Obrist who used and popularized the term 'laboratory' in conjunction with exhibitions. He described his exhibitions *Cities on the Move*, *Utopia Station*, *Do It*, and the already mentioned *Laboratorium* 'as some sort of laboratory'⁴².

³⁶ SCHLÖGEL, Karl (1998). *Jenseits des Großen Oktober – das Laboratorium der Moderne in Petersburg 1909-1921*. Wolf Jobst Siedler Verlag: Berlin

³⁷ NAKOV, Andrei B. (1975). *2 Stenberg 2: The 'Laboratory' Period (1919-1921) of Russian Constructivism*. Annely Juda Fine Art: London

³⁸ *A Laboratory of Modernity: Image and Society in the Weimar Republic*, Exhibition, Harvard Art Museum, 1998

³⁹ GIEDION, Sigfried (1929). 'Lebendiges Museum' in: *Der Cicerone*, volume 21, February 1929. pp103-106.

⁴⁰ STANISZEWSKI, Mary A. (1998). *The Power of Display – A history of Exhibition Installation at the Museum of Modern Art*. Cambridge, Mass./London: MIT Press

⁴¹ WALL, Tobias (2006). *Das Unmögliche Museum: Zum Verhältnis von Kunst und Kunstmuseen der Gegenwart*. Transcript: Bielefeld. See here also Chapter 6, Section 'The first architecture museums'.

⁴² OBRIST, Hans-Ulrich (2002). 'Evolutional Exhibitions' contribution for *attese – biennale ceramica arte contemporanea*. <http://www.attese.it/attese1/article13/> [last accessed: 16.06.2008] and O'NEIL, Paul (2006). 'Hans-Ulrich Obrist' an interview with Paul O'Neil in *Contemporary Magazine*, Issue 77, 2006

While the term 'Laboratory' is used in all three different categories to explicitly or implicitly denote the experimental character or function of the exhibitions, institutions and/or periods the authors rarely define the term and the way they are using it. An ambiguity of the term arises here from the fact that it is used, often simultaneously, to describe a physical set-up, an actual place or space as well as a method or mode of operating, working or thinking. The ambiguity that comes with the avoidance of a clear definition has its advantages as it leaves room for interpretation of the term by the recipient (exhibition visitor, reader, client etc). In regard of a coherent research about the Laboratory Exhibition, however, one has to define the term.

Provisional definition of the Laboratory Exhibition

The following provisional definition of the Laboratory Exhibition has been established in order to conduct the research for this thesis.

- The Laboratory Exhibition provides a testing ground in which architectural research is conducted.
- The Laboratory Exhibition is concerned with the investigation, development and experimentation of hitherto unimagined, un-tested, un-established architectural propositions.
- The Laboratory Exhibition acknowledges and deliberately incorporates elements of uncertainty and risk regarding its implementation, perception and result.
- The Laboratory Exhibition deals with architecture in its widest sense, encompassing a material reality, an intellectual construct, and/or a societal process.
- The Laboratory Exhibition is a continuation and integral part of the architectural praxis and is predominantly driven and generated by architects.

A question that arises from such a definition of the Laboratory Exhibition is whether a specific exhibition has to fulfil all these aspects to qualify for this category of exhibitions. As the Laboratory Exhibition is a type of exhibition that encompasses in itself a great diversity in regard of its form, size, locality, content, methodology, or audience it has been anticipated from the outset of this thesis that different aspects of this definition will also have varying importance or relevance in different Laboratory Exhibitions. It has been, however, anticipated that all these different aspects can be found to some degree within the Laboratory Exhibition.

One of the most crucial notions within this definition is the interpretation of the Laboratory Exhibition as a critical and experimental praxis. The thesis follows here a

Marxist notion of the term 'praxis'. Praxis in this sense is first and foremost a transformative and conscious action. Praxis is active and directed at changing something. Praxis differs from mere practice as it connects theory with practice whereby theory is transformed into a practical social action.

The cultural theorist and literary critic Raymond Williams describes the dialectic between theory and praxis in his book *Keywords* when he writes that 'praxis is practice informed by theory and also, though less emphatically, theory informed by practice, as distinct from practice uninformed by or unconcerned with theory and from theory which remains theory and is not put to a test of practice'⁴³. For Williams, 'praxis' is 'Practice as Action'⁴⁴. For Mark Smith 'praxis' entails the notion of being 'creative, [...] other-seeking and dialogic'⁴⁵. Smith's argument refers to Aristotle's differentiation of *teoria*, *poiesis* and *praxis* and he relates this philosophical concept to progressive educational theory. Smith maintains that, while 'the productive [*poiesis*] begins with a plan or design, the practical [*praxis*] cannot have such a concrete starting point [but] starts with a question or situation'. He further asserts that praxis is also 'always risky' as 'in praxis there can be no prior knowledge of the right means by which we realize the end in a particular situation'⁴⁶. All these points are in accordance with the above-described experimental and transformative character of the Laboratory Exhibition⁴⁷. What both Williams' and Smith's positions suggest and what this thesis maintains is that 'praxis' – and in our case the Laboratory Exhibition as one form of such a praxis – has to be regarded, in its essence, as a political project.

Research questions and thesis structure

There are three main objectives that can be identified for this thesis. Firstly, it has been the purposes of this thesis to investigate the historical development towards the Laboratory Exhibition. The thesis hereby assumes that the Laboratory Exhibition has been of a historically continuous yet periodically increasing importance within the field

⁴³ WILLIAMS (1976). p317

⁴⁴ Ibid.

⁴⁵ SMITH, Mark (1999). 'Praxis' in: *The encyclopaedia of informal education*. Online source: Source: <http://www.infed.org/biblio/b-praxis.htm>. [Last accessed: 16.06.2008]

⁴⁶ All SMITH (1999)

⁴⁷ It is particularly the differentiation between the *teloi* or aims of Aristotle's *poiesis*, namely the mere production of something, and that of *praxis*, namely practical wisdom (or *phronesis*) and knowledge that differentiates 'practice' from 'praxis' and the mere production of built objects and spatial or social situations (including exhibitions) from a theoretically informed, experimental action or production such as that of the Laboratory Exhibition.

of making architectural exhibitions and within the architectural praxis in general.

Secondly, the thesis aims to dissect the various means and elements that constitute the Laboratory Exhibition by examining the actors involved in its production, by analysing the various media used in the Laboratory Exhibition and by exploring the various local used for the Laboratory Exhibition.

Finally, the thesis wants to suggest that this specific form of architectural exhibition is an indispensable part of the architectural praxis in which and through which architecture can be progressively transformed and that such a contemporary praxis refers to and relies on its historical precedents.

In order to achieve these objectives the research for this thesis followed one superordinate and three subordinated questions. While the superordinate question has been a driver for the thesis as a whole and thus relates to all three parts of the thesis, the subordinate questions all deal with more specific aspects and are dealt with in the three parts respectively.

The superordinate research question of this thesis has been:

Why do architects make Laboratory Exhibitions?

This overarching question has been the driving rationale for the entire research for this thesis. However, there is a different emphasis within the three parts of the thesis regarding the interpretation or shift in focus of this question. PART I looks particularly at the theoretical implications of this question. PART II examines it predominantly under a historical focus⁴⁸. PART III finally approaches the question under contemporary and practical considerations. However, these three varying emphasizes on the superordinate question are not mutually exclusive but are regarded in a dialectic relation to one another.

In order to explore the thesis' objectives as outlined above, a set of three subordinate questions has been established, each of which is again addressed in one of the three parts of the thesis. These sub-questions have been:

a) *What are the key preconditions for the use of the exhibition as an architectural laboratory?*

⁴⁸ See also Chapter I – Research methodology p17.

b) What are the historical momenta in the evolution of the Laboratory Exhibition that a contemporary exhibition praxis can refer to or draw on?

c) How, and to what end, can an experimental framework be produced and deployed in today's praxis of the Laboratory Exhibition?

Through this succession of questions the concept and praxis of the Laboratory Exhibition is thus examined and analysed on various levels in the three parts of the thesis. Sub-question a), which is dealt with in PART I, leads to an exploration of acting subjects, the actual object and media of the exhibition, as well as the very action of exhibiting. All three aspects are explored here in their historical development, generating and supporting a theoretical basis for the Laboratory Exhibition.

Sub-question b), which is dealt with in PART II, then considers the historically emerging forms and locale of the Laboratory Exhibition, grouping them again into places of production, curated exhibitions, and laboratories in 'real scale'. This part also exemplifies how the theoretical preconditions explored in PART I have been relevant in the historical developments towards the Laboratory Exhibition.

Finally the concept of the laboratory is explored through five examples of a contemporary exhibition praxis in PART III. Sub-question c) investigates here how a contemporary exhibition praxis is related to both the theoretical basis formulated in PART I as well as to the three investigated categories of the Laboratory Exhibition as established in PART II. Ultimately it intends to produce a recommendation about the employment and value of the Laboratory Exhibition in the contemporary architectural praxis.

Research perspective

Implicit or indeed imperative to the concept of 'praxis' is that of the acting subjects, the agents or actors who create through and with a praxis as described above. Through the main research question these subjects have already been identified for this thesis as the 'architects' and it is from the perspective to this specific group of actors that the thesis approaches its topic, the Laboratory Exhibition. It has been already mentioned above that the author and the thesis are not interested in the legalistic or professional definition of 'the architect' but regard 'the architect' as someone engaged in the intellectual and material production of architecture. 'The architect' is of course, in both versions, a constructed figure (as would be 'the visitor'), synthesizing the vast variety of different architects into a generic model, encompassing as well as negating the contradictions that exist within such a group. It is nevertheless assumed that one can

construct a common perspective for this research that originates from 'the architect'.

It has already been stated that the 'architectural exhibition' is underexplored topic. Yet there is even less research and critical analysis done on the architectural exhibition that comes from a perspective of architects in relation to their praxis. This thesis aims to address this lack and specifically investigates the nature and purpose of architectural exhibitions, and here in particular the Laboratory Exhibition, in relation to their contribution to the architectural praxis as such. In that respect, the thesis presents a so-called Practice-Led Research that aims to produce knowledge about or within particular practice⁴⁹.

One can argue that a paradigm shift occurs here through this practice-led approach which distinguishes the thesis for instance from those approaches that focus either on a historiographical development of architectural exhibitions and their relation to the formation and transformation of the architectural institution or focus on the question of architectural representation and the exhibition in relation to mediation and perception. Examples of the former would be Pieper (1980), Lampugnani (1981), Feireiss (2001), or Ford and Sawyers (2003)⁵⁰. Examples of the latter would be Blau and Kaufman (1989), Staniszewski (1998), or Rattenbury (2002)⁵¹. These are aspects that cannot be completely ignored and are indeed explored as subordinate parts within this thesis⁵². However, the contrasting specific perspective of this thesis remains that of the primary producer of architecture, 'the architect'⁵³.

In regard of this specific perspective of the architect as acting subject the thesis will further explore the implications of multi- and cross-disciplinary producers of the

⁴⁹ See also Research Methodology, p17

⁵⁰ PIEPER, Jan (1980). 'Architektur als Exponat' in: *Kunstforum international – Architekturmuseum – Architekturvermittlung*, Band 38 2/80; LAMPUGNANI, Vittorio Magnago (1981). 'Architectural Exhibitions - A fragmentary historical survey for Europe and the U.S.A.' in: Bauausstellung Berlin GmbH (ed.) *Internationale Bauausstellung Berlin – Die Neubaugebiete – Dokumente, Projekte – Heft 2 Erste Projekte*. Berlin: Quadriga; FEIREISS (2001); FORD, Hannah and SAWYERS, Bridget (eds.) (2003). *International Architecture Centres*. Wiley-Academy: London

⁵¹ STANISZEWSKI (1998); BLAU, Eve and KAUFMAN, Edward (eds.) (1989). *Architecture and its Image – Four Centuries of Architectural Representation – Works from the Collection of the Canadian Centre for Architecture*. MIT Press: Cambridge, Mass. / London' RATTENBURY, Kester (ed.) (2002). *This is not architecture*, London: Routledge

⁵² See here in particular PART I, Chapter 4.

⁵³ Regarding the concept of primary and secondary producers of architecture see here PART I, Chapter 2. The thesis will make it clear here that the division between architects (or architectural curators) as producers on the one side and recipients (visitors, academics or critics) on the other side is untenable as it does not reflect the reality of architectural production.

Laboratory Exhibition. On the one hand, this will partly specify the acting subject, the aforementioned 'generic' architect. And on the other hand it reflects the nature of the producers of those Laboratory Exhibitions that are presented as contemporary praxis in PART III of this thesis. Historically, one can of course establish a long lineage of architects that either originally came from different disciplines or have ventured in neighbouring disciplines often working in parallel in other fields besides architecture⁵⁴. But, as Hans Hollein proclaims, we also live today 'in an age of crossover'⁵⁵ and one cross-disciplinary situation that is of particular relevance to the thesis' topic is that of the architect who also works as curator. Many contemporary curators of architectural exhibitions or architectural institutions come originally from an architectural background, - Jean-Louis Cohen, Vittorio Magnago Lampugnani, or Dietmar Steiner would be just three examples of very established figures here⁵⁶. Similarly, architects 'switch sides' and practice - often just temporarily - as curators – the already mentioned Hans Hollein, Hardt-Walter Hämer or Massimiliano Fuksas are examples here⁵⁷. In the British and more recent context one could mention here architect-curators such as Shumon Bazar of *Newbetter*, Celine Condorelli of *Support Structure*, or Markus Miessen of *Studio Miessen*, but also the author and *PAR*⁵⁸.

The reason to declare a specific perspective of the approach to this thesis is that one has to regard an exhibition not only as subjected to ideology but as an ideological construct in itself. Following Terry Eagleton's dissection of the different meanings and aspects of the complex concept of 'ideology', one can already assert that the relation between architecture exhibitions and ideology are multifold⁵⁹. Five definitions of ideology identified by Eagleton are here of particular relevance in relation to the

⁵⁴ See here in particular PART I, Chapter 2, Section 'The architect as multi-disciplinary producer', p32

⁵⁵ CAPEZZUTO, Rita; OBRIST, Hans Ulrich and BOERI, Stefano (2004) 'Hollein vs. Biennale. Biennale vs. Fuksas', Interview with Hans Hollein and Massimiliano Fuksas, *Domus* 874 October 2004. p46

⁵⁶ Cohen was, from 1997-2003, director of the *Cité de l'architecture* and the *Institut d'architecture français*; Lampugnani was, from 1990–1995, director of the *Deutsche Architekturmuseum* in Frankfurt; Dietmar Steiner is, since 1994, director of the *Architekturzentrum Wien* in Vienna.

⁵⁷ Hans Hollein's curatorial praxis includes, besides many other exhibitions, the Austrian Pavilion of the 1968 *Milan Triennale* or the 1996 *6th Architecture Biennale* in Venice. For a list of Hollein's exhibition praxis see: <http://www.hollein.com/index1.php?lang=en&l1ID=5> [Last accessed: 16.06.2008]
Hämer and Fuksas were curators or directors of the *IBA Berlin 1987* and the *7th Venice Architecture Biennale* respectively and both feature in detail in PART III, Chapter 8 and 11.

⁵⁸ PAR – Praxis for Architectural Research Ltd., founded in 2007 by Tatjana Schneider and Florian Kossak

⁵⁹ EAGLETON, Terry (1991). *Ideology: An Introduction*. Verso: London

Laboratory Exhibition: a) ideology as the process of production of meanings, signs, and values in social life; b) ideology as a body of ideas characteristic of a particular group or class; c) ideology as ideas which help to legitimate a dominant political power; d) ideology as that which offers a position for a subject; and e) ideology as forms of thought motivated by social interest.

By concentrating on a specific function or praxis of the architecture exhibition and by identifying the acting subject, namely the architect, from whose perspective this study is undertaken, the thesis makes it possible to identify the sources and nature of the ideologies that govern the production of the Laboratory Exhibition in order to subject it to a critique that can uncover the social, political, and/or cultural interests conveyed by it⁶⁰.

Research methodology

As it has been already stated, the thesis sits within the realm of practice-led research approaches. This is in delineation to the so-called Practice-Based Research that is normally conducted through the production of a creative artefact or project that forms the basis of the research's contribution to new knowledge. While the author partly continued his curatorial exhibition praxis during the research for this doctoral thesis – two exhibitions that were made during this time feature in Appendix B – this praxis was not used to conduct specific experiments or to produce new knowledge for this thesis.

In accordance with practice-led research, that usually appropriate a number of different research methodologies, this thesis does not follow *one* orthodox research

⁶⁰ The ideological implications of architecture and its production, and more specifically that of the architectural exhibition, would merit a study in its own right and it would go beyond the remit of this thesis to deal with this topic in depth. One can therefore only refer to some of the work that has been already done in this field.

With regard of the ideological critique on functionalism see for instance: BERNDT, H., LORENZER, A., and HORN, K (1969). *Architektur als Ideologie*. Suhrkamp: Frankfurt am Main or MÜLLER, Sebastian (1974). *Kunst und Industrie: Ideologie und Organisation des Funktionalismus in der Architektur*. Hanser: München

With regard of the implications of a specific political ideology on architecture see for instance: AMAN, Anders (1992). *Architecture and Ideology in Eastern Europe During the Stalin Era*. MIT Press: Cambridge, Mass. or TAYLOR, Robert R. (1974). *The Word in Stone: The Role of Architecture in the Nationalist Socialist Ideology*. University of California Press: Berkeley

With regard of the ideology and social power relations expressed in and through the built environment see for instance: MARAN, J., JUWIG, C., SCHWENGEL, H., and THALER, U. (2006). *Constructing Power – Architecture, Ideology and Social Practice*. Lit Verlag: Münster/Hamburg. or WILLIAMS, Richard J. and VIDLER, Anthony (2004). *Architecture and Civility – Ideology and the Public Realm*. Routledge: London

With regard of the ideology of the exhibition space see for instance: BENNET, Tony (1995) *The Birth of the Museum – History, Theory, Politics*. Routledge: London. or O'DOHERTY, Brian (1986). *Inside the White Cube – The Ideology of the Gallery Space*. Lapis Press: San Francisco

methodology. It rather takes the experimental character of 'praxis' as the starting point for the study itself. This relates to the earlier elaborations about 'praxis' that, as Smith has put it, 'starts with a question or situation' but not with 'a plan or design'. In that respect, the undertaking of this study has been as 'risky' and partly without 'prior knowledge of the right means by which we realize the end in a particular situation'⁶¹ just as a laboratory praxis itself. Yet while the process to 'realize its ends' was not premeditated the questions for this thesis that stood at its beginning were both guiding and decisive and the research for this thesis had its intrinsic structure.

The methodology of the thesis can be best described as following a hybrid and integrative approach in which several established research methodologies are appropriated and combined⁶². The three main methodologies that are used throughout the thesis are a) qualitative research; b) historical comparative research; c) case study research. Each of these different methodologies are used with a varying emphasize in the three parts of the thesis thus producing a triangular model of combination with varying dominances.

a) The qualitative research methodology is not specific to anyone part of the thesis but is an overarching approach to the research topic and the consulted sources and collected data. This approach is exploratory rather than definitive. It focuses on the questions 'why' and 'how' and only deals with 'what', 'where' and 'when' in relation to these two other questions. A qualitative methodology inadvertently deals with a smaller sample group than a quantitative methodology, a fact that is reflected both in the selection of very specific momenta in the emergence of the Laboratory Exhibition as well as in the five examples of contemporary Laboratory Exhibitions that put the historical part of the thesis in relation to one contemporary praxis. In that respect findings from such a methodology are by nature exemplary rather than empirically substantiated. The thesis acknowledges this partial limitation but believes that the exemplary nature of source material is here indeed of greater benefit in supporting the theoretical and practical findings of this thesis.

Four different methods are predominantly applied under this qualitative methodology, namely the participation in the setting, direct observation, in depth interviews and the analysis of text documents and visual material. The latter method is more or less self-

⁶¹ SMITH (1999)

⁶² One could argue that this is in essence a very 'architectural' approach, reflecting the tendency of researching and practicing architects to borrow from extra-disciplinary sources and methodologies and to make use of these for the own discipline. See also GROAT, Linda and WANG, David (2002). *Architectural Research Methods*. John Wiley & Sons: New York

evident and shall not be discussed here in more detail. However, 'participation in the setting', 'direct observation', as well as 'in depth interviews' shall be explained here in more detail regarding their specific relevance for this thesis.

- The participation in the setting as well as the direct observations are results of the author's agenda for this thesis, namely to interrogate the author's own exhibition praxis and to put it 'into a general context or framework that makes this personal praxis relevant for a wider professional and academic audience by offering a theoretical and historical exploration of the architectural exhibition'⁶³. Both methods are common to practice-led research. As mentioned already above, this puts the author partly 'within' the object or subject-matter of his research, blurring the distinction between subject and object, between the actor and the acted upon⁶⁴. Again, the thesis acknowledges the implications of such a set-up but asserts that the benefits out-weigh possible conflicts of interest.

Participation and direct observation of the author in, for instance, the five case studies of contemporary praxis are considered as a unique chance and support the here presented causality between praxis and theory. To ensure a necessary degree of distance and objectiveness the personal experience is never used as the sole source of information but other sources are considered and put in relation and perspective to this knowledge. However, it should be made clear that the author does not believe in an epistemology that contains an unchallengeable truth which could be obtained through an impartial or objective analysis of a topic such as the Laboratory Exhibition. Operating with the notion of 'truth' is regarded as neither useful nor possible in this regard⁶⁵.

- A series of in-depth interviews with producers of architectural exhibitions – architects, architect-curators, curators – has been conducted in order to gather first hand material on exhibiting architecture and the relation of exhibition to the architectural praxis. These interviews have also informed the research direction of the thesis and enabled the fine-tuning of the research question. They were further useful in testing or discuss

⁶³ See also PROLOGUE for further exploration of author's praxis in relation to thesis

⁶⁴ It has to be said that this is different from the so-called practice-based research, as it has been established in the fine arts over the last ten to fifteen years, in which research is done by the artist through the production of a (or a series of) work and not, at least nor primarily, as a research about such a work. New knowledge is produced, in this instance, through the production of a new work and the new work itself and not through the reflection on this production process.

⁶⁵ 'Truth' is moreover regarded by the author as a social construct following a Marxist understanding of social epistemology

certain thoughts or theoretical arguments presented by the author about the Laboratory Exhibition with other producers involved in this form of praxis. Within the thesis the interviews are used as excerpts throughout the three parts of the thesis and can also be found as full transcripts in APPENDIX A.

The criteria for the selection of the interviewees partly originate from the thesis' ambition to connect the author's own experience and praxis with a wider theoretical and practical framework. In that respect all interviewees have either been part, in some form or another, of the author's past exhibition praxis or they have been influential through their work for this praxis. However, beyond this personal or subject selection criteria the interviewees also present an exemplary range of practitioners involved in the production of architecture exhibitions in general or the Laboratory Exhibition in specific. They are all distinguished architects and/or curator/critics, with different cultural or national backgrounds, with varying forms of practices or related to influential institutions of different sizes and nature.

The selected interviewees – Will Alsop, Jean-Louis Cohen, Kristin Feireiss, Massimiliano Fuksas, and Stuart MacDonald, and Otto Steidle – can be divided into three different but complementary sub-groups, - architects, architect-curators, and curators⁶⁶. Within the first group would be Alsop and Steidle; the second group would include Fuksas and Cohen; and the third group would consist of MacDonald and Feireiss⁶⁷. However, as it has been discussed previously, the boundaries between these different forms of engaging in the production of architectural exhibitions are increasingly fluid⁶⁸. Yet for the interviews it has been specifically these respective roles as primary producers of architecture exhibitions that were of interest to the thesis.

b) One of the main arguments of the thesis is deduced from and supported through a historical comparative research on the trans-historical praxis of the

⁶⁶ This selection of interviewees is by no means a group that could be described as being fully representative of all those involved in the production of Laboratory Exhibitions or even architecture exhibitions in general. But, as mentioned above, this has not been the rationale for this selection.

⁶⁷ An additional interview was conducted with the artist Joep van Lieshout whose work is situated between the art and the architectural object. While the author anticipated that Lieshout's cross-over approach would make him particularly susceptible for the notion of the Laboratory Exhibition the interview led to a different finding. See APPENDIX A.

⁶⁸ Alsop, for instance, also curated exhibitions. Fuksas activity as curator was focussed predominately around his directorship of the 2000 Venice Biennale and a following mega-exhibition about the history of Rome in the Coliseum while he has since then been concentrating on his architectural praxis. Cohen and MacDonald who have been both directors of national architecture centres, the *Cité de l'Architecture/IFA* in Paris and *The Lighthouse* in Glasgow respectively, but are now working as academics.

Laboratory Exhibition. According to Lawrence Neuman, historical comparative methodologies put historical development and cross-cultural (or cross-disciplinary) differences and/or similarities at the centre of the research⁶⁹. Historical comparative methodologies are rather used in the social science than in art or architectural history which tend to operate in a much more linear way. But a historical comparative methodology is a useful approach here if one wants to explore the reason for a specific social or cultural outcome of phenomena or if one wants to investigate whether historical explanations for such phenomena are still valid and useful today. Using predominantly qualitative methods a historical comparative methodology tends to lead to one possible answer to a research question rather than 'the' answer⁷⁰.

In the context of this thesis such a historical comparative methodology allowed for the exploration of the Laboratory Exhibition as a trans-historical phenomenon that, as the thesis argues, developed over a range of almost 500 years. In that respect the thesis does not focus on one specific historical period, as it is more common in an orthodox historical research today, but embarks on a, one could argue, out-of-fashion 'long historical narrative'⁷¹. Within this long narrative, the thesis deliberately jumps from period to period, engaging rather with decisive momenta in the development of the Laboratory Exhibition at specific moments in time. These momenta are then put into a relation to one another, exploring their combined relevance and reference points for the Laboratory Exhibition in a contemporary architectural praxis.

While this historical comparative methodology is of particular relevance for PART II of the thesis in order to examine the historically 'Emerging Forms and Locale of the Laboratory Exhibition' it is also partly applied in PART I and PART III. In PART III, which deals with contemporary examples of Laboratory Exhibitions, this methodology's objective is then to investigate whether historical explanations of a specific

⁶⁹ NEUMAN, W. Lawrence (1999). *Social Research Methods: Qualitative and Quantitative Approaches*. Allyn & Bacon: Columbus, Ohio

⁷⁰ 'The' answer would also imply an absolute truth, a concept that the author rejects in regard of the thesis' topic.

⁷¹ As most famous proponents of the 'long historical narrative' in architectural history one could name, among others, Banister Fletcher with *A History of Architecture*, (1896); Nikolaus Pevsner with *An Outline of European Architecture* (1943); Steen Eiler Rasmussen with *Towns and Buildings*, (1951); John Summerson with *Architecture in Britain 1530-1830*, (1953); or Lewis Mumford with *The City in History*, (1961).

The next generation of architectural historians already concentrated on a more limited period, namely the 19th and 20th century and Modernism. One could name here Leonardo Benevolo with *Storia dell'architettura moderna*, (1960); Manfredo Tafuri and Francesco Dal Co with *Modern Architecture*, (1976); or Kenneth Frampton with *Modern Architecture – A Critical History*, (1980).

phenomenon are still valid and relevance today.

c) It is this question of relevance for the contemporary praxis that instigated the final methodology from the above described hybrid and integrative approach that forms a triangular model of combination, - Case Study Research. Case study research is a methodology that originates from medical sciences and is today predominantly used in social and educational sciences⁷². Findings are here usually deduced from data collected from a set of either extreme, paradigmatic, or critical cases. As such this methodology is usually used to generate knowledge through the analysis of cases rather than using the cases to illustrate a certain principle.

The thesis adopts and appropriates here both approaches to case studies. It uses selected exhibition examples, which could be described as both critical and paradigmatic examples, to generate knowledge about the contemporary Laboratory Exhibition praxis through their analysis but it also uses them to illustrate the concept of the Laboratory Exhibition as it is developed in the preceding two parts of the thesis.

The five examples of Laboratory Exhibitions are, in chronological order as well as in the order as they are presented in PART III: *Internationale Bauausstellung Berlin 1987* [International Building Exhibition Berlin 1987, short IBA Berlin 1987]; *Architectural – Zwischen Architektur und Photographie*, Otto Steidle und Verena von Gagern, München, 1993 [Architectural – Between Architecture and Photography, Otto Steidle and Verena von Gagern, Munich 1993]; *Traumhaus 2000 – Agentur für Wohnwünsche*, Architekturklasse Akademie der Bildenden Künste München, 2000 [Dreamhome 2000 – Agency for Living Desires, Postgraduate Architecture Course of the Academy of Fine Arts Munich, 2000]; *Less Aesthetics, More Ethics*, 7th Architecture Biennale Venice, 2000; *Urban Cabaret*, G.L.A.S., Glasgow, 2001⁷³.

The primary selection criterion for the five exhibition examples followed the previously stated aim to reflect upon the author's own praxis and to put this praxis into a wider

⁷² Case studies concepts also found their way into architecture and architectural education. An early example for the former would be the famous Case Study House Programme from 1945-1962 in the USA, see: SMITH, Elizabeth A.T. (1989). *Blueprints for Modern Living – History and Legacy of the Case Study Houses*. MIT Press: Cambridge, Mass. An example for the latter would be BLUNDELL JONES, Peter (2002). *Modern Architecture Through Case Studies*. Architectural Press: London. The book forms the conceptual basis for the architectural and urban history course at the University of Sheffield which is taught through case studies. A point where social science research approaches and architectural or urban research converge through the use of case studies would be Jane Jacobs' study and book *The Death and Life of Great American Cities* from 1961.

⁷³ See PART III Chapter 8 – 12

theoretical, historical and practical context. The selected five exhibitions have all been part of the author's own praxis or have been instrumental in developing this praxis. The author's involvement ranges here from attentive visitor, to exhibiting participant, to exhibition designer and to exhibition curator. In some instances, the author's role, similarly to the already made argument of a cross- or multi-disciplinary praxis, would combine several of these roles at once⁷⁴.

However, besides this primary, personal or subjective selection criterion, the five examples have also been selected according to their diversity in regard of scale, form, place, and agents involved. The diverse range of the case studies is deliberate in order to examine their structural and ideological principles rather than any formal consistencies. The thesis makes here the assumption that the principles, which refer to the definition of the Laboratory Exhibition applies to a mega-event like the Venice Architecture Biennale as well as to a small-scale gallery exhibition like *Traumhaus 2000*; to touring exhibitions in an institutional environment like *Architectural* as well as to process-led, community-based exhibitions like *Urban Cabaret*; to exhibitions devised by individual architects as well as to collectively conceived exhibitions.

Through the examination of the author's own praxis, the boundaries between subject and object of this study are deliberately and consciously crossed, to a point where the author becomes his own object of observation. However, it also has to be made clear at this point that these selected exhibitions are 'passive objects' that are retrospectively analysed after their actual existence. They are not, as would be the case in a practice-based research, exhibitions which have been conceived and executed during the research for this doctoral thesis to act as a deliberately set up experiment in which a certain hypothesis is tested⁷⁵. In that respect, the thesis is predominantly a *reflective* praxis able to create a critical distance to its object of investigation.

However, combined the above-described three research methodologies – qualitative research, historical comparative research, and case study research – allowed also for a research approach that could itself be described as an experimental praxis. The

⁷⁴ Each case study states at the beginning the author's role or involvement

⁷⁵ Nevertheless, the research done as well as additional knowledge gained since beginning the work on the thesis found their reflection and application in a number of exhibitions that I curated in that period, most notably *Glasgow is made by us* and *SHIFTS*, which are both presented in the APPENDIX. *Glasgow is made by us* could apply knowledge regarding participatory processes, 'growing' exhibitions, and 1:1 installations in particular. *SHIFTS* referred to a tradition of exhibitions that produced specifically new work for an exhibition and consequently generated a new discourse on an architectural topic that was first tested within the exhibition setting.

research for this thesis started with a clear set of questions and a set of assumptions but without a fixed experimental set-up or research methodology and strategy. It rather adopted, appropriated and combined, at points even unknowingly, existing methodologies from different disciplines forming a cross- or trans-disciplinary research model. It is in this respect that one could draw a parallel between the approach to the presented thesis and its very topic, the Laboratory Exhibition. Yet this still leaves a clear distinction between the architectural Laboratory Exhibition – temporary, installed in space, usually collaboratively produced – and a thesis about it – now a permanent document, linearly organized between two covers, individually produced.

One of the clearest distinctions between an exhibition and a doctoral thesis – that could both be concerned with the same topic as in this case with the architectural Laboratory Exhibition – is the relation between text and image. With the exception of those rare occasions where text is used as the main medium of communication within an architectural exhibition [see for instance Figure 70: *French Pavilion at the 7th Architecture Biennale in Venice*] text in exhibitions is mostly used as secondary information that accompanies the main exhibits, whether these are drawings, paintings, photographs, models or installations. Text is here also often used in various 'layers' allowing for a varying degree of engagement with it, ranging from the instantaneous capturing of an exhibition title to the studious immersion in supplementary material.

Within the doctoral thesis this relation is reversed and the text becomes, almost by definition, the main part of the work. While 'spatially' structured through PARTS, chapters, or sub-sections, the main text is not built up in a hierarchy in which some parts would be more important than others. Ideally, no part of the thesis can be omitted⁷⁶. Images act within this doctoral thesis as illustrations to the text. They show an object which the author can not expect the reader to have any visual knowledge of; they visually support and enhance points made within the text; or they act as a substitute for a text when the image is more able to illustrate a circumstance or relation that is otherwise only difficult or lengthily described with words.

There are obviously numerous ways in which text and image can be combined within such a work and hence allow or avoid cross-referencing, deliberate and 'accidental' connections, or generally enhance or hinder the readability of text and the images alike. The author has chosen a method of organizing the images within the text of this thesis that could be considered as diametrically opposed to a method that one might

⁷⁶ An exception to this is presented here through the footnotes that are clearly spatially as well as regard the content subordinate to the main body of text. Similarly, the APPENDICES present a part to the thesis that is of secondary or additional function to the main body of text.

use within an exhibition. Text and images are not integrated or in an immediate relation to one another – as they usually would be in an exhibition setting – but the images or figures are placed at the end of each respective chapter forming separate and identifiable blocks within the thesis. On the one hand this dislocates the images from the text it immediately refers to and hence might hinder a contiguous perception of text and image. On the other hand it allows for some un-expected or 'accidental' cross-references between the images as they are now grouped together over several pages. Through this arrangement, the images – while still clearly relatable to the respective text passage – gain some level of autonomy over the text and allow the reader to make some independent or non-prescribed observation. This latter aspect relates the thesis' arrangement of text and images back to an experimental exhibition arrangement in which the viewers are invited to make their own connections between the exhibits and thus create numerous different understandings or readings of the exhibition.

Yet the author believes that this approach, the combination of three different research methodologies as well as the above-described arrangement of text and images facilitated a work that, while not necessarily following an orthodox procedure, is now as multilayered as it is profound, that is both specific and generic and that it is in itself an example of the causality between praxis and theory that it aims to describe.

Thesis aims and objectives

To conclude this introduction one can summarize the aims and objectives of this thesis as follows:

The thesis first of all addresses the need and opportunity for an investigation into the nature, history and contemporary meaning of architectural exhibitions, a field of study that is currently still underexplored. The overriding interest of this thesis lies thereby in exploring the architecture exhibition's potential to contribute to the advancement of architecture as an intellectual and artistic discipline by means of experimentation within the exhibition setting. It is here by the hypothesis of this thesis that architects have developed, in parallel with the historical development of the discipline, a specific form or type of the architectural exhibition in order to experiment, develop and test emerging architectural ideas. The thesis calls this type of exhibition the Laboratory Exhibition.

In regard of the exploration and theoretical conceptualization of the Laboratory Exhibition the thesis has three main objectives. Firstly, this thesis wants to investigate

the theoretical prerequisites of the Laboratory Exhibition as well as the historical development towards this exhibition type. Secondly, the thesis aims to dissect the various means and elements that constitute the Laboratory Exhibition by investigating five examples of a contemporary exhibition praxis which are put into the contexts of the thesis' theoretical and historical explorations. Finally, the thesis wants to suggest that this specific form of architectural exhibition is an indispensable part of the architectural praxis in which and through which architecture can be progressively transformed.

The thesis investigates this specific exhibition type, the Laboratory Exhibition, by interrogating the author's own exhibition praxis and by putting this praxis into a general theoretically explored and historically analysed context or framework that makes this personal praxis relevant for a wider professional and academic audience. Ultimately the thesis aims to provide useful knowledge for others working in this field by making this research relevant for a wider professional and academic audience and by offering a theoretical and historical exploration of the architectural exhibition and the Laboratory Exhibition in particular as it does not exist to date.

PART I - Preconditions of the Laboratory Exhibition

In order to understand the historical development and contemporary praxis of the Laboratory Exhibition one has to examine it within the wider context of architecture in general and the architectural exhibition in particular. An exhibition is often regarded as a medium in which finished products or artefacts are displayed as if outside or after the actual production process. Contrary to this view this thesis understands the architectural exhibition as an integral part of the production of architecture.

The aim of Chapter 2 and Chapter 3 is to establish the role of both the subject and the object within this production process. In other words, one has to examine the producer and the product as well as their relation, to one another. While this is the case for any production process and producer/product relation in our case the subject equals with architect and the product with architecture. Yet both these terms are by no means absolutely defined. When analysing or speaking of production one always has to do this within its specific historical context and stage of social development. Similarly, producer and product, architect and architecture, have to be investigated in the same contextual manner. Besides the specific aspects of context there are also characteristics that are common to all historical stages of production. Both these aspects of the architectural production – the relation to historical context and its meta-historical or universal characteristics – will be explored here.

We will see that the first and foremost subject/object relation is established through the nature of action in which the subjects acts upon the object. In the case of the architect and architecture this is the production of the product by the producer. As we will see, the term 'architecture' has a two-fold meaning as it describes both production or activity and the product of this activity. Furthermore, following Marx's argument in his '*Outline of Political Economy*' (*Grundrisse*), production, distribution, exchange and consumption have to be regarded as 'members of a totality'⁷⁷. The necessary mediating movement between production and consumption is generally characterized through distribution and exchange. In the case of our subject matter – architecture – this 'mediating movement' is indeed the very act of making the architectural concept public as a physical reality. This will be explored in Chapter 4 that looks specifically at the medium of the exhibition and the process of exhibiting architecture.

⁷⁷ MARX, Karl (1859). *Grundrisse der Kritik der Politischen Ökonomie / A Contribution to the Critique of Political Economy*. Online Version: Marx.org 1993, Marxist.org 1999, transcribed by Tim Delaney. Online source: http://www.marxists.org/archive/marx/works/download/Marx_Grundrisse.pdf. p28

CHAPTER 2 – The Producers of Architecture - Defining the Subjects

It is about the concerted experimenting and testing of architecture through the architect, the curator and the visitor together.

Kristin Feireiss in an interview with the author, 01.12.2005

As architects, we can't live without looking into other disciplines.

Massimiliano Fuksas in an interview with the author, 15.02.2006

I think the important thing about all this is the audience. "Why do you make exhibitions?" "Well, it's for an audience". But who is that audience?

Stuart MacDonald in an interview with the author, 30.07.2005

Exhibiting, putting an object, whether material reality or intellectual idea, into the public realm is in essence a political act in which the proposition made by the producer is scrutinized, discussed, negotiated, accepted or rejected by another subject, a social group or society at large. Presupposed to this political act is the existence of the political subject and a society in which this 'zvon politikon', the political animal as Marx calls it, can operate as individuated actor. Marx regarded the 18th Century as the point in history which 'produces ... [the] isolated individual'⁷⁸. But while the 18th century is clearly the epoch in which this individualisation happens on a wide scale and reaches all different classes the thesis argues that – particularly in the realm of the arts and architecture – this individualisation takes already place in the 15th century. It is in particular the Italian Renaissance that witnesses the emergence of the isolated individual and the 'political animal which can individuate itself only in the midst of society'⁷⁹. It is therefore at this moment that the thesis starts with its historical examination and contextualisation of the architectural exhibition.

The personification of architecture

Although it might seem at first obvious to equate the producer of architecture with 'the architect' this is by no means as defined. If we speak of architecture as a material product – in essence architecture as a building – than we would have to include all those agents involved in the actual production process of this object. And when we further follow Marx's argument that the product and in consequence also the producer only become complete through the act of consumption then we have to also include the user. Similarly if we speak of architecture as an intellectual construct, an idea or cultural concept then we would have to include not only those who initially formulated

⁷⁸ MARX (1859). p21

⁷⁹ Ibid.

these ideas but also all those who perceive architecture and consequently alter this idea through their perception. This is an argument that is similarly made by Jonathan Hill, who suggests that 'to use a building is also to make it'⁸⁰. According to Hill, this transformation through usage applies just as much to 'a physical transformation' as it does to 'conceiving [the building] in a new way'⁸¹.

While architecture, both as an intellectual construct or subject-matter and a physical reality dates back to Antiquity and we know of professionals that were engaged in the process of designing and constructing buildings from the early ages on, it is the 15th century that witnessed the emergence of the architect in the sense as we understand it today. Until then, the architect did not exist as an artistic and intellectual individual. Those engaged in the production process of architecture were either independent artisans or integral part of the medieval building lodges and guilds that were responsible for the entire building production - from the design to the execution of the, in most cases, religious buildings.

The change of this situation occurs in Italy during the first half of the *Quattrocento*. It is a change that would be theoretically formulated by Leon Battista Alberti in his treatise '*De re aedificatoria*', first published in 1452. In this treatise he theoretically introduced for the first time the modern concept of the architect. The crucial step that Alberti made was to give the architect the authorship, or 'author function' as Tim Anstey⁸² calls it, over the building while detaching the architect from the actual '*teatro*' – the building site and construction process, in effect from the final building⁸³. Alberti gives the responsibility over the building site to the figure of the builder. He thus destroys the union that existed in the medieval guilds between the intellectual conception and the material realisation of the building.

⁸⁰ HILL, Jonathan (2003). *Actions of Architecture – Architects and Creative Users*. Routledge: London. p72.

Hill develops his argument about the creative user from Roland Barthes text 'The Death of Author' (1968) in which Barthes suggests that the author function does no longer lay with the writer but that the 'creative' reader reconstructs the text through his/her reading and thus by giving the text new meaning which relates to their own experience and knowledge.

⁸¹ Ibid.

⁸² ANSTEY, Tim (2005). 'The ambiguities of disegno'. in: *The Journal of Architecture*, Volume 10, Number 3. p295

⁸³ Anstey's use of the 'Author Function' relates to Michel Foucault who originally coined the term in his essay 'What is an Author' in: FOUCAULT, Michel (1977). *Language, Counter Memory, Practice*. Cornell University Press: Ithaca, NY. Foucault refers here predominantly to the author of literary texts but his main argument, namely that 'the author' is a socially and historically constructed or sanctioned function can be appropriated for the architect as the author of a specific design or building.

This division suggests two distinctive subjects or producers involved in the production of architecture – the architect and the builder. Yet, Alberti realises that this picture remains incomplete and introduces a third subject – the patron. Only in unison are these three able to create and produce architecture. We can speak here of a personification of the architectural process through the personalities of the architect/designer, the builder, and the patron. While this process remained largely anonymous until the 15th century it was then that one witnessed a clear, personalized differentiation between those three groups of producers⁸⁴.

The separation into these three distinctive roles has several consequences for the architectural production. The first consequence affects the architect and the medium in which he works. As long as the designing architect, the builder, and to some extent also the patron were combined in the medieval building lodge, architectural drawings – as far as they existed – were encrypted and had only to be understood within the limited circle of the initiated members of the lodge⁸⁵. After Alberti, the architect had to develop means or media to make architecture public and to convey the intellectual concept to both the patron and the builder who would each be requiring very different kinds of information. The separation of the acting subject into dependent but singular entities made a projective mediation of architecture paramount for the process of architectural production⁸⁶.

The theoretical exploration of 'the architect' has of course continued after Alberti through the numerous architectural treatises that often dealt with both the theoretization of the object – architecture – as well as of the subject – the architect; they are too many to be mentioned here. Yet in relation to the notion dividing 'the architect' into different figures or characters it is appropriate to mention here, John Evelyn, English writer, gardener and co-founder of the Royal Society in London, who, 200 years after Alberti, added a fourth figure to those already introduced by Alberti.

⁸⁴ There exist only fragmental information about individuals involved in the design and building process before the Renaissance. We know of several master builder families in the Gothic that existed in Germany and Central Europe. One of such families was the Parler family with Heinrich Parler the Older who was involved in the construction of the Dome in Cologne and Peter Parler who built the large parts of the Dome in Prague from 1353-85. Other similar families were the Ensingers or the Böblingers from Southern Germany. Villard de Honnecourt would be an individual exemplar. Itinerant master-builder in the 13th century he is especially known through his model-book.

⁸⁵ This does not mean that we do not have any architectural imagery prior to the 15th century. The depiction of architecture, partly even related to the production process of architecture existed much earlier as we will see later. Records of patrons however exist of course almost continuously since Antiquity.

⁸⁶ For the development of the drawing as a new means of mediation and presentation see also Chapter 3, Architecture is not a Building, Architectural Media, Architectural Drawing. p.53

Evelyn called those former three the *architectus ingenio* – the designer of architecture; the *architectus sumptuarius* – the patron or financier of architecture; and the *architectus manuaris* – the builder of architecture. The fourth figure that he then introduces reflects in part Evelyn's own activity as a writer and critic of architecture⁸⁷. He called this figure the *architectus verborum*⁸⁸. In essence this *architectus verborum* is a reflective and critical figure. The *architectus verborum* is, as Forty puts it, 'the architect of words, skilled in the craft of language, and whose task was to talk about the work [of architecture] and interpret it to others'⁸⁹. He is therefore as much a theoretician as a critic of architecture. The decisive step that is made here by Evelyn is that the producers of architecture include now not only those figures that are involved in its production before an act of consumption but, with the critic, also a figure that perceives and hence consumes architecture – regardless whether architecture is here a written theory, a drawing or a building.

By explicitly classifying the different producers of architecture yet calling them all *architectus* Evelyn goes beyond Alberti who already regarded the three figures architect, patron and builder as indispensable figures in the architecture process. Forty underlines this when he writes that 'Evelyn's personification of the parts of architecture expressed an important idea: that architecture consisted not just of one or two of these activities, but of all four of them in concert'⁹⁰.

More recently, Manfredo Tafuri and Beatriz Colomina have been similarly describing the role of the critic as a producer of architecture. Tafuri questions in '*Theories and History of Architecture*' the critic's role in relation to the production of architecture and whether the critique can in fact be outside architecture or independent from the architectural production process. Colomina refers to Tafuri when she writes that 'the critic [incapable of detachment from the object] simultaneously produces a new object

⁸⁷ Although Evelyn did not produce a proper architectural theory he wrote extensively about architecture and, as we would call it today, the built environment. One has to mention here in particular his *Diaries and Correspondence*. Beside designs for pleasure gardens (Euston Hall for instance) he also produced plans for the rebuilding of London after the 1666 fire.

⁸⁸ Evelyn's thought to embody the architect in four different persons is described by Adrian Forty in his book '*Words and Buildings – A Vocabulary of Modern Architecture*', p11. Forty refers here to the '*Account of Architects and Architecture*' that was appended to Evelyn's edition of Fréart de Chambray's '*Parallel of the Ancient Architecture with the Modern*', published in 1650.

⁸⁹ FORTY, Adrian (2004). *Words and Buildings – A Vocabulary of Modern Architecture*. Thames & Hudson: London. p11

⁹⁰ Ibid.

and is produced by it. Criticism that presents itself as new interpretation of an existing object is in fact constructing a completely new object'⁹¹.

In her essay '*Architectureproduction*'⁹² Colomina writes that 'Architecture, as distinct from building, is an interpretive, critical act.' This means that architecture can only exist as such once it has undergone a critical 'act of interpretation'. This follows in effect the Marxian argument that the product only becomes complete through the act of its consumption. Yet Colomina and Tafuri as well as, prior to those two, Alberti and Evelyn do not explicitly include the user amongst the characters involved in architectural production. And while they, with the exception of Alberti, include already the critic who, as said above, can be regarded as one consumer of architecture they do not 'descend' from a certain elitist position that makes a distinction between the producer and the consumer of architecture.

The architect as multi-disciplinary producer

We have established that the architect consists of various actors or characters that are connected through a veritable 'division of labour' of the architectural production process. But while the figure of the architect is divided into these sub-roles we can also observe at the same time a multi-disciplinary engagement and artistic production by those that would be traditionally seen as 'architects', or as Evelyn called them, the *architectus ingenio*.

This multi-disciplinary engagement does not take place to the same extent throughout all historical or architectural periods. On the contrary, there are periods where a crossover would have seemed as natural that it would not have been regarded as something exceptional. At other points in time the consolidation and institutionalisation of the discipline of architecture and architectural profession prevented individuals of working in other fields than in that of their particularly training and professional affiliation⁹³.

⁹¹ COLOMINA, Beatriz (1994 / 1996 Reprint). *Privacy and Publicity: Modern architecture and mass media*. MIT Press: Cambridge, Mass. p279

One should note here that this assertion is of course also a self-serving or promoting statement as it puts the critic onto the same level as the object (the producing architect) of her critique.

⁹² Revised and reprinted in: RATTENBURY (2002). pp207-221

⁹³ The contemporary expression of these restrictions can be found for instance in the Architect's Act 1997 where in Part IV – Use of the Title 'Architect', §20 (1) it reads " A person shall not practice or carry on business under any name, style or title containing the word "architect" unless he is a person registered under this Act."

Yet the reason why we have to examine the multi-disciplinary engagement in relation to our subject matter is that it is precisely due the artistic and intellectual potentials arising from the work in-between various artistic and scientific disciplines that new conceptual and formal ideas emerge and find expression. Working multi-disciplinarily enables the producer to experiment or test in one discipline what can then be applied in another. The direction here is not necessarily from the small to the large, from the temporary to the permanent, but it is the most likely direction of crossover between the disciplines. In regard of the concept of the perspective for instance, one could discover a progressive transfer from the drawing to the painting, to the stage set and into an architecture whose complex spatiality is developed according to perspective principles⁹⁴.

The first period where this multi-disciplinary engagement becomes explicit is again the early 15th century in Italy. The artists of the Renaissance were rarely trained and practising in just a single discipline. They would be knowledgeable in various crafts and would excel in a number different fields of the Arts. No clear distinction was made between their activity as a painter, sculptor, architect, town planner, engineer or theoretician. In this respect they follow the Renaissance ideal of the polymath. The figure that might be the foremost expression of this '*uomo universale*' is Leonardo da Vinci, who, although he actually did not build, worked as well in the field of architecture⁹⁵. [See Figure 1]

We encounter here two different strands of origins or backgrounds of those figures that would work as architects in the Renaissance. On the one hand we have those who came to architecture from the actual building crafts or from specific applied arts like gold work or woodcarving⁹⁶ [Evelyn's *architectus manuaris*]. On the other hand we

⁹⁴ See here as well Chapter 3 – Temporary Architectural Installations – Masques, stage designs and propaganda displays

⁹⁵ Da Vinci produced, for instance, a design for the cupola of the Duomo di Milano (1487) but also designs for ideal cities, architectural elements like stairs or designs for new construction techniques.

Other exemplars would be Filippo Brunelleschi (1377-1446), who began as a goldsmith and sculptor, Leon Battista Alberti (1404-72), who was also lawyer and theorist, Donato Bramante (1444-1514) who first trained as a painter, Baldessare Peruzzi (1481-1536) who began with illusionist architectural fresco paintings, Michelangelo Buonarroti (1475-1564), who worked as painter, sculptor and architect, to name only a few of the most famous artists from the 15th and 16th century. Those who would work only as architects remained the exception.

⁹⁶ Burckhardt attributes the development of wooden model partly to the fact that 'many architects had begun as wood-workers and made models easily'. BURCKHARDT, Jacob (1962). *Die Baukunst der Renaissance in Italien – Gesammelte Werke - Band II*. Wissenschaftliche Buchgesellschaft: Darmstadt. English translation (1985) Secker & Warburg: London. p77

have those who were, as Forty puts it 'people independent of the building crafts, trained in, particularly, the visual arts of painting and sculpture'⁹⁷. It is not the objective of this thesis to investigate this distinction any further in order to establish whether the one or the other strand led to a greater multi-disciplinary engagement. What is however of importance here is the crossing of and exchange over the disciplines' boundaries and the respective dialogue between different artistic languages, media, dimensions and temporalities.

Evelyn himself gives us an example of the multi-disciplinary achievements of a contemporaneous artist. In his diaries he describes a visit to St. Peter in Rome and speaks of 'Bernini, a Florentine sculptor, architect, painter, and poet, who, a little before my coming to the city, gave a public opera (for so they call shows of that kind), wherein he painted the scenes, cut the statues, invented the engines, composed the music, writ the comedy, and built the theatre'⁹⁸. How these experiences with the temporary architecture of the *opera* find, some twenty years later, their transfer into a building can be seen in Bernini's *Scala Regia* (1663-66) [See Figure 2]. Pevsner et al speak here of Bernini's 'masterly implementation of scenic effects like optical illusions, exaggerated perspective, and hidden light sources'⁹⁹ [author's translation]. We can speak here of the Baroque ideal of the *Gesamtkunstwerk* or perfect synthesis of the arts¹⁰⁰.

Referring to Evelyn's *architectus verborum* one has to add another facet to the multi-disciplinary engagement of the producer of architecture. This further facet was architectural theory expressed through the written word finding its own new medium in the architectural treatise¹⁰¹. With the architectural treatise architects [*architectus ingenio*] ventured into a literary field bordering on philosophy, science and poetry. Thoenes writes that the development of 'the new [Renaissance] style itself and devising a new formal canon "all'antica" both therefore took place on the level of linguistic reflection'¹⁰². With the 15th century architectural theory became an all-

⁹⁷ FORTY (2004). p29

⁹⁸ EVELYN, John (1883). *Diary and Correspondence*, Volume 1 (edited by William Barry). George Bell and Sons: London. p127. The original diaries date from 1644.

⁹⁹ PEVSNER, Nikolaus, FLEMING, John, HONOUR, Hugh (1987). *Lexikon der Weltarchitektur*. (second edition). Prestel: Munich. p85

¹⁰⁰ It should be noted here that the term was not yet used in the 17th century.

¹⁰¹ See also Chapter 3, *Architecture is not a building – Defining the object*; and Chapter 4, *Exhibiting Architecture*

¹⁰² THOENES, Christof (2003). 'Introduction'. In: *Architectural Theory - From the Renaissance to the Present*. Taschen: Köln. p10

important aspect of the architectural production. Reflection and dissemination of ideas became an 'indispensable part of [the architect's] professional activities' as Thoenes puts it ¹⁰³.

But changes to this multi-disciplinary engagement start to occur again in early 18th century. As described above, up to this point, artists would work simultaneously in various fields including painting and sculpture, stage design, and architecture. As architects they would be responsible for the design of the whole building, including its structure, its exterior and interior decoration and to some extent even its furniture. This changes with the Rococo when a number of specialist artisanal professions and professionals emerge who would become responsible for the interior decoration of a building.

A new division of labour or rather a division of professions unfolds. This division is accompanied and fostered by an institutionalisation of the profession, supported by the increasing foundation of professional academies or societies. In contrast to the 15th century academies those new foundations of the 18th century would now start to clearly define their respective professions, watching carefully over the accession into their bodies. Without being a member of such academies it should become increasingly impossible to acquire any commissions, at least from any official body ¹⁰⁴.

A further indicator for the progressive division into separate disciplines and professions can be found in the clear professional distinctions made in Diderot's *Encyclopédie*, which was started in 1751 and completed in 1780 ¹⁰⁵. In it, Diderot devised a taxonomy of human knowledge, graphically devised in the *Système figuré de connaissance humaines* that had three fundamental categories: *Memoir*, *Raison*, *Imagination*. Architecture or more precise '*architecture civile*', as he calls it, featured in *Imagination* and under the subheading *Poésie* along with the other Arts like music, painting, sculpture and engraving. It was thus separated from its technical or physical aspects

¹⁰³ Ibid.

¹⁰⁴ The earliest academies existed since the late 15th century. But while these early academies, for example the *Accademia del Disegno* in Florence founded by Cosimo I de' Medici and visited by Michelangelo, were academies that would include artists practising as painters, sculptors and architects, the 'second wave' of academies starting around 1750 were predominantly mono-disciplinary. About the emergence and role of the academies see also PART II, Chapter 5.

¹⁰⁵ Full title: *Encyclopédie, ou dictionnaire raisonné des sciences, des arts et des métiers*, transl. Encyclopaedia, or a systematic dictionary of the sciences, arts, and crafts. The *Encyclopédie* comprised in total of 35 volumes.

as well as the individual building crafts¹⁰⁶. Architecture and the architect would be limited again to Evelyn's *architectus ingenio*.

If one regards the above explorations of the architect's ability to cross the boundaries of the discipline in order to experiment with knowledge and techniques from related art forms one can also conclude that these transgressions are linked to specific moments in time that in themselves seem to be more prone to experimentation. One can argue that it is precisely the threshold or boundary between disciplines as well as between distinctive periods that is the space in which experimentation and change seems to be more likely, in part also necessary. While the more clearly defined zones in- between those boundaries, the actual core disciplines or the high-point of a (historic) period are predominately spaces of consolidation, the transitional zones bare the lightness of the not already there and the almost gone that liberate intellectual and artistic production. It is in these transitional zones or transforming spaces that architects and artists use to facilitate experimental work or indeed work with the laboratory exhibition. These are the spaces of 'shift', as Alison and Peter Smithson call them, that lead to new architectural questions and propositions¹⁰⁷[See Figure 3]. One could equally speak of the edges, fringes or the perimeter of a discipline, a discourse or a culture in which these experimental set ups are favoured or even inevitable¹⁰⁸.

In the case of the spaces and zones between the different disciplines we are confronted with a multi-directional transition enabling experiment and change. The influences and transgressions happen here in both or several directions. It is a back and forth, often a circular not a linear exchange. In the case of the transitional spaces between historical periods this transition is of course one-directional and progressive.

¹⁰⁶ 'Architecture pratique' and stone masonry was part of the meta category *Memoir* with the sub-categories: *Histoire – Histoire naturelle – Usage de la nature – Arts et Métiers*. Military architecture and statics or structural engineering on the other hand would be classified under the meta-category *Raison* with the sub-categories: *Philosophie – Science de la nature – mathématique – mécanique*.

¹⁰⁷ See also SMITHSON, Alison and Peter (1982). *Alison + Peter Smithson: The Shift*. Architectural Monographs 7. Academy Editions: London

¹⁰⁸ This is not to say that the laboratory is not possible in the core zones or spaces of consolidation but they will find a stronger opposition.

The emergence of an audience

If one accepts that the object – architecture – is altered through its perception, changed through its usage, or completed through its consumption, then one has to include all users or consumers into the group of producers of architecture¹⁰⁹. In relation to the thesis' subject-matter – the architectural exhibition – this would translate into the audience playing a decisive part in the production of the exhibition. This is already apparent in the fact that meaning, although premeditated by the exhibiting architects or curators, is produced through the process of perception on the part of the viewer and would hence apply for any type of exhibition. The productive role of the audience becomes even more important in those exhibitions that are participatory and experimental in character.

The usage of buildings or indeed architecture, and hence the existence of the user of architecture, is of course as old as architecture itself. What is however a new phenomena surfacing in the 15th century is the emergence of an 'audience' for architecture. It is an audience that becomes interested in architecture as a subject-matter or artistic, intellectual cultural construct. It is an audience that would engage with architecture and its production independently from any direct consumption by means of its inhabitation.

Through the act of making public, of materializing an idea – be it through text, drawing, model or building – a framework can be created in which architecture can be 'read', understood, valued and hence exhibited. The Italian Renaissance was the first modern culture to be aware of this process. The city and its built fabric became the object of investigation and reflection [See Figure 4]. Both were understood as the material expression of the historical, social and economic relationships of its acting subjects¹¹⁰. And while the people of the Renaissance were reflecting both on the object as much as on the subject the subject-object relation was produced through literature, philosophy, the arts as well as through architecture and architectural theory. It is in that respect, that architecture would for the first time be established as an object in its own right

¹⁰⁹ See also HILL (2003). Hill develops in *Action of Architecture* the notion of the 'creative user' who supersedes the 'passive' and the 'reactive' user and who 'creates a new space or gives an existing one new meanings and uses contrary to established behaviour', HILL (2003) p88

¹¹⁰ To name just two of the most prominent examples one can refer here to Dante Alighieri's *Commedia*, written between 1308 and 1321, and Niccolò Machiavelli's *Il Principe*, written in 1513. While both works do not explicitly have the city as their topic, the city (Florence in particular), their inhabitants and rulers as well as the physical layout or appearance play a decisive role in the respective explorations by those two Florentine authors. It is particularly noteworthy that Dante places *Hell*, *Purgatory*, and *Heaven* in identifiable urban locations.

which would interest a public beyond those involved in the architectural production process.

Yet, one has to be careful not to overestimate the number of people who can be included in such a public. Although cities and cultural centres like Siena or Florence were republics – they were by no means class-less. The necessary education and time to engage with architecture and architectural theory on an intellectual level would still have been the privilege of the upper social classes. It would have required an education or knowledge on the side of the audience in order to engage with architectural media like the emerging architectural treatises¹¹¹. In effect we are dealing with a public that consists of nobility, the civil or religious rulers, bourgeois merchants or artisans, and *letterato* or intellectuals and artists. Jacob Burckhardt describes this group as 'eminent dilettanti', who, in the 16th century, would 'constantly pursue [architecture] with fervour'¹¹². According to Burckhardt this involvement of a wider public was encouraged through the 'publication of illustrated books [that] soon made the participation easier for non-professionals'¹¹³. The reference to the *dilettanti* and to *participation* underlines that architecture and the building process had developed from the once secluded affair in which only the initiated could engage to a public interest that would also be discussed and challenged from outside the profession.

Christof Thoenes supports this argument when he writes that 'there was a strong tradition of deliberation on questions of art and architecture in Florence'¹¹⁴. He also mentions a case of intentional educational distribution of architectural knowledge to a general public. He writes that 'the administration of the town of Siena made the teaching of architecture a public responsibility. A contract with Baldessare Peruzzi was drawn up which required him "to teach his art to anyone who so desired"'¹¹⁵.

¹¹¹ Christof Thoenes claims that the architectural treatise of the 15th and 16th century would have 'reached readers of all classes both within and outside the building profession' [THOENES (2003). p12]. However, this seems questionable as even the newly appearing printed books would not have been available in great numbers and to an affordable price as to reach also the lower social classes. Even more restricting would have been the grade of literacy in the 15th and 16th century. See: GRENDLER, Paul F. (1966). 'Religious Restlessness in Sixteenth-century Italy'. In: *CCHA Study Sessions*, 33. p25]

¹¹² BURCKHARDT (1962, first Editions in 1867 and 1878). p12
Regarding the architectural treatise see also PART One – Chapter 1 – Architectural Media

¹¹³ Ibid.

¹¹⁴ THOENES (2003). p13

¹¹⁵ Ibid.

How important the Renaissance architects regarded this wider public is reflected in the development that the architectural treatise took from a purely scholarly discourse written in Latin and without illustrations, as in the case of Alberti's *De re aedificatoria libri decem*¹¹⁶, to treatises written in vernacular Italian with often more page space for illustrations than text, as in the case of Sebastiano Serlio's *Tutte l'opere d'architettura et prospettiva*. Accordingly, the readership of these treatises and in consequence the audience of architecture became manifold. Thoenes points out the intended readership of the architectural treatise were neither just architects, nor just clients, or just interested lay persons but that the 'correct answer lies in the combination of all these aspects'¹¹⁷.

Another field in which this newly established audience would directly engage with architecture as proposition were the emerging architectural competitions that first were revived at the beginning 15th century with the pivotal 1401 competition for the second door of the Baptistery in Florence¹¹⁸. They create a situation where several architects compete for a commission by producing designs that would not only be judged by the actual client but by a larger group of, predominantly official, representatives of the public. The works, drawings and increasingly also the now emerging models, would be temporarily displayed in a public space, first just to the jury and, in many cases, later to a wider interested public. We can thus speak of two audiences here. The first one would consist of selected 'experts' commenting on and judging the architectural project, and in consequence also the architect [See Figure 5]. A second audience would – with no or little influence on the actual jury decision – perceive, comment and evaluate the exhibited proposals and the institution of the competition. By showing not only the winning scheme but also those not selected for further development, exhibitions of architectural competition act as well as justification for the decision made by the jury¹¹⁹. These competition presentations can be regarded as one of the earliest forms of

¹¹⁶ Alberti wrote *De re aedificatoria libri decem* between 1442 and 1452. The first printed appeared in 1485 and the first translation, by Cosimo Bartoli, that contained also illustrations was only published more then hundred years later in 1565.

¹¹⁷ THOENES (2003). p12

¹¹⁸ Whether this competition between, amongst others, Ghiberti and Brunelleschi was in fact really the first competition proper cannot be established for certain. However, as Middledorf Kosegarten writes, 'it has become a cliché, in art history [to call this competition] the first artistic competition in post-medieval times' (cited in: LIPSTADT, Hélène (1989). *Architectural Publications, Competitions, and Exhibitions*. in BLAU, E. and KAUFMANN, E. (eds.). *Architecture and its Image- Four Centuries of Architectural Representation*. Centre Canadien d'Architecture / Canadian Centre for Architecture: Montreal. p121)

¹¹⁹ For a comprehensive history of the architectural competition see BECKER, Heidede (1992). *Geschichte der Architektur- und Städtebauwettbewerbe*. DIFU/Kohlhammer: Berlin

architectural exhibition in which parts of the architectural production process were presented and new architectural media found their public and testing ground¹²⁰.

Another form of competitions in conjunction with public exhibitions emerge in the 17th century with annually academy competitions such as the Prix de Rome of the *Academie de Beaux Arts* in Paris. First established in 1663 the Prix de Rome was in effect a competition to establish artistic excellence (within the rules given by the *Academie*) and was held in several categories, including painting, sculpture, etching, musical composition and, since 1720, architecture¹²¹. The final winning projects were then shown in a public exhibition, an event that would gain a similar social status as the Salons that were held annually at the Louvre.

In the case of the aforementioned competitions the public interest was directed towards an architecture that was still within the process of making or indeed of architecture that was never intended to become a physical reality as in the case of the academy competitions. But architecture in its built manifestation should find a similar if not even bigger audience. The aspect of architecture or rather specific buildings becoming cultural attractions for an educated audience found one of its earliest and foremost manifestations in form of the so-called *Grand Tour*, undertaken by usually young aristocrats or artists from Northern Europe during the eighteenth and early nineteenth century¹²². [See Figure 6]. The Grand Tour, initially a tour of Italy and that was later extended to the Greek peninsula and Asia Minor, was fuelled by the archaeological excavations at Herculaneum in 1711, the Palatine in Rome in 1729, or Pompeii in 1748. These discoveries led to a systematic exploration of Roman architecture, by professionals as well as by so-called amateurs, connoisseurs or *dilettanti*. Antique or historic architecture became a subject-matter to study not only by those who would

¹²⁰ It is remarkable that this form of competitions and their presentation in exhibitions exist in more or less the same way until today.

¹²¹ The contestants had to go through three stages, lasting 72 days, and had to produce works according to a set brief. The prize was one-year scholarship at the French Academy in Rome. See also <http://www.culture.gouv.fr/rome/Rome.html> [last accessed: 16.08.2008]

¹²² It would go beyond the remit of this thesis to have an in-depth exploration of the Grand Tour. There exist also already a number of publications that can be consulted here. See for instance: BLACK, Jeremy. (1985). *The British and the Grand Tour*. Croom Helm: London
CHARD, Chloe (1999). *Pleasure and Guilt on the Grand tour: Travel Writing and Imaginative Geography, 1600-1830*. Manchester University Press: Manchester
CONTI, Flavio. (1979). *The World of Pleasure*. Cassell: London
HIBBERT, Christopher. (1987). *The Grand Tour*. Guild: Brighton
HAWCROFT, Francis W. (1988). *Travels in Italy, 1776-1783 : based on the memoirs of Thomas Jones*. Whitworth Art Gallery: Manchester
REDFORD, Bruce (1996). *Venice and the Grand Tour*. Yale University Press: New Haven
SALMON, Frank. (2000). *Building on Ruins : The Rediscovery of Rome and English Architecture*. Ashgate: Aldershot
WILTON, Andrew and BIGNAMINI, Ilaria (eds.) (1996). *Grand Tour : The Lure of Italy in the Eighteenth Century*. Tate Gallery: London

refer to it in their own design work but also by those who would have to judge or consume such a referential architecture¹²³.

While many of the travellers who undertook the Grand Tour would document visited buildings and ruins with sketches, drawings, paintings or in writing, an artistic as well as commercial activity developed in parallel that would supply the visitor with imagery of the important sites and architecture. These could take the form of architectural *vedute*, as painting or print, and miniature cork or plaster models¹²⁴ [See Figure 7]. Many of these architectural representations would find their way into the already mentioned Salons and Academy exhibitions. Here they would be shown to an even wider audience, not able to see these architectures 'for real'. To paraphrase the title of an exhibition catalogue, 'Rome was carried over the Alps'¹²⁵ in order to become accessible for everyone.

Yet those people who undertook the Grand Tour, precursors of our modern tourist, would not only visit and study ancient ruins. Individual pieces of more or less contemporary architecture had gained a similar status and were part of a traveller's itinerary. One such example is given by Hubertus Günther who again refers to Giorgio Vasari's account of Michelangelo's design for *S. Giovanni dei Fiorentini*¹²⁶. *S. Giovanni* was never built but Tiberio Calcagni's cut-away model [See Figure 11] of it gained its own life shortly after Michelangelo's death when it went on a permanent display in the Florentine consulate in Rome where it remained until 1720. The model featured in many 17th Century guidebooks to Rome in which it was considered as one of the obligatory sights for visitors. Although originally conceived as a tool and medium in the production process of an architectural project, the model acted for the longest time of its approximately 140 year long existence as an exhibit not only for other architects to study but - as we would call it today - a tourist attraction. The example of the *S. Giovanni dei Fiorentini* model is interesting in as much as it illustrates that by the early seventeenth century there existed a non-professional audience that was not only interested in

¹²³ This phenomenon is not dissimilar to the architectural tourist of today that travels to Bilbao or Barcelona in order to see the latest 'Gehry' or 'Herzog & De Meuron'.

¹²⁴ Life size casts and in some cases original building parts would also be objects collected in order to become part of collections and or form illustrative material for educational purpose. See also PART ONE – Chapter 1 – Architectural Media.

¹²⁵ HELMBERGER, W. and KOCKEL, V. (1993) *Rom über die Alpen tragen. Fürsten sammeln antike Architektur: Die Aschaffenburgische Korkmodelle*. Landshut / Ergolding

¹²⁶ GÜNTHER, Hubertus (1994) ' Jacques Le Mercier – S. Giovanni dei Fiorentini' in: MILLON, H.A. and LAMPUGNANI, V.M. *The Renaissance – From Brunelleschi to Michelangelo – Representation of Architecture*. Bompiani: Milan. p474

the actual architectural monuments or buildings to be seen in cities like Rome, Florence or Venice, but that regarded both the architecture as such, as well as the artistic quality of certain architectural media a subject matter worthy of being exhibited and visited.





Figure 1: Leonardo Da Vinci, *Plan for the city of Imola*, 1502 and *The Virgin of the Rocks, Detail*, 1508, (National Gallery London).



Figure 2: *Scala Regia* by Giovanni Lorenzo Bernini in the Apostolic Palace of the Vatican, 1663-1666. Drawing by W.L. Leitch, c.1841.

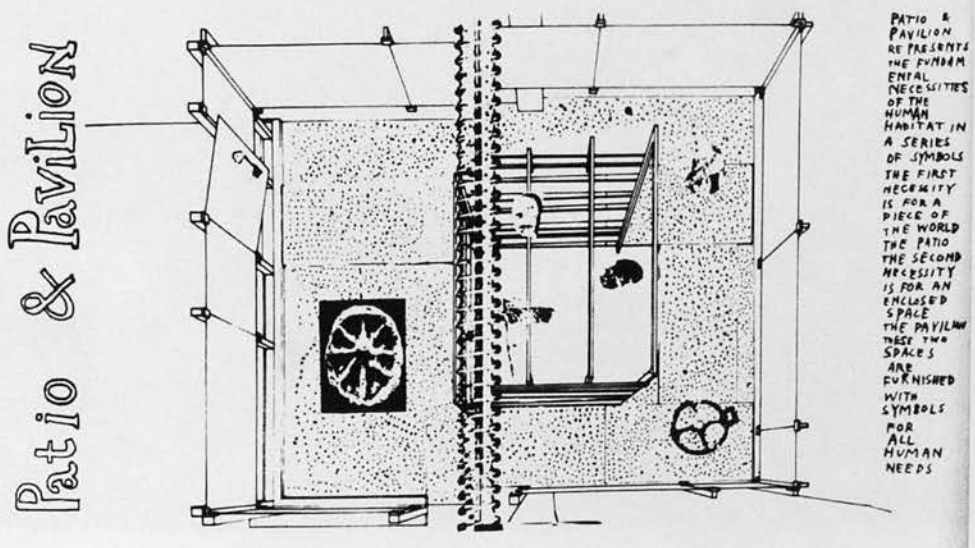


Figure 3: *Patio & Pavilion* by Alison and Peter Smithson, Eduardo Paolozzi, and Nigel Henderson for the exhibition *This is Tomorrow* at the ICA, London, 1954.



Figure 4: Domenico di Michelino, Dante and the three Kingdoms (Detail), 1465.

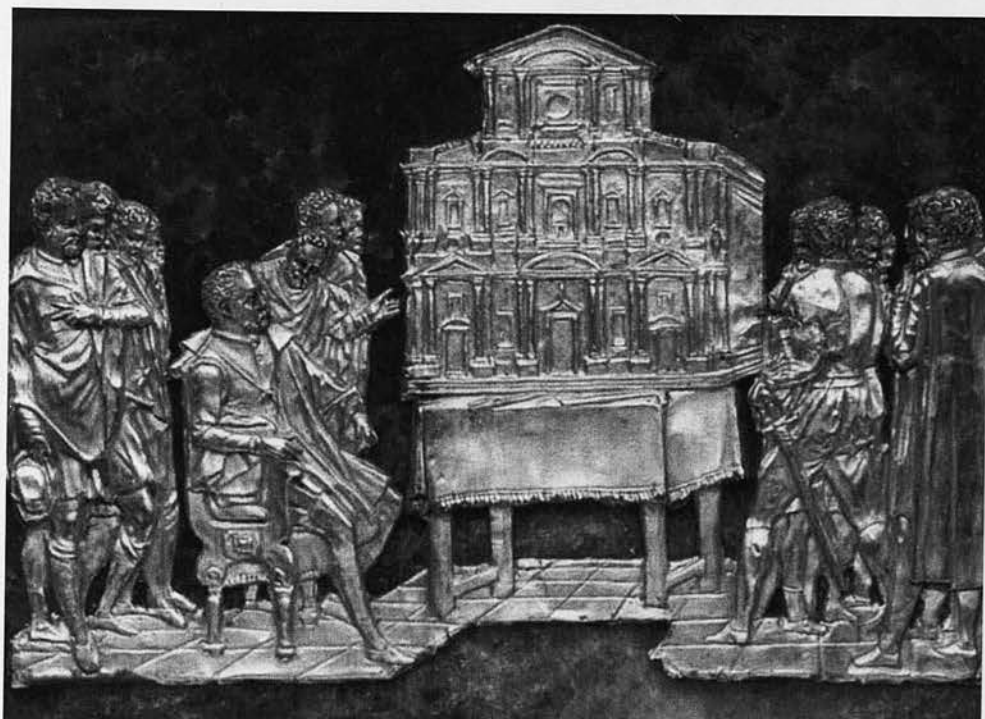


Figure 5: Giambologna, Bernardo Buontalenti Presenting the Arch Duke Francesco de' Medici with the Model of the Facade of Florence Cathedral, c.1585. Gold Ajuré Relief.



Figure 6: Grand Tour – John Wood, after Gavin Hamilton, James Dawkins and Robert Wood Esqrs. First Discovering Sight of Palmyra, 1733, Engraving, (RIBA London).

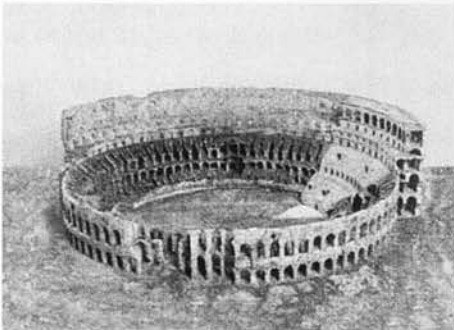


Figure 7: Left: Antonio Chichi, Cork Model of the Coliseum, c. 1790, (Museum Darmstadt); Right: Giovanni Battista Piranesi, Vedute of the Titus Arch, 1748.

CHAPTER 3 – Architecture is not a Building - Defining the Object.

Creation and production, that's what is fantastic. Because this is culture and culture is the only interesting thing, the only really interesting thing in our world.

Massimiliano Fuksas in an interview with the author, 15.02.2006

Did you know that there are more people in the UK in churches from Monday to Saturday than there are on Sunday? [...] I like to think, that people go there because they are wonderful spaces. And there is this sensuality in experiencing these spaces.

Will Alsop in an interview with the author, 15.08.2005

While the previous chapter was concerned with the emergence and role of the subject - the producer of architecture - this chapter is concerned with the object – architecture. The necessity of defining the object at this point arises from a misconception found in many publications on the architectural exhibition and which persists particularly in the professional realm of the architectural practice. This misconception is characterized through titles and contents of books like *This is not Architecture*, edited by Kester Rattenbury¹²⁷, statements by architects or curators including such prominent figures as Herzog & De Meuron who claim that 'Architecture itself can not be exhibited'¹²⁸, Boris Podrecca who regards the architectural exhibition as a 'substitute reality'¹²⁹, Blau und Kaufmann who write that '... architectural museums collect and display not their subject-matter, but works that are representations of it...' ¹³⁰, or Jean-Louis Cohen for whom the architectural exhibits are not 'the veritable object of architectural work [but] whose relation to the [architectural] creative process is indirect'¹³¹. But if the objects within an architectural exhibition would really only be 'substitutions of reality', a

¹²⁷ RATTENBURY (2002). Rattenbury uses the 1928 photography of Mies van der Rohe's Barcelona Pavilion as an example for 'not being architecture' and she compares this in the text to René Magritte's painting 'Ceci n'est pas une pipe'. But the comparison does not work here. While the painted pipe in Magritte's painting is in fact a representation of a pipe and the photographic image of the pavilion isn't a pavilion that does not lead to the conclusion that Magritte's painting is not art and Mies' photograph is not architecture.

¹²⁸ HERZOG, Jaques and DE MEURON, Pierre (2002). 'Alles nur Abfall'. In: URSPRUNG, Philip (ed.). *Herzog & De Meuron – Naturgeschichten*. Lars Müller Publishers: Baden. p78

¹²⁹ PODRECCA, Boris (2001). 'Exhibition - a substitute reality'. In: Feireiss, Kristin (ed.), *The Art of Architecture Exhibitions*. NAI Publishers: Rotterdam. p54

¹³⁰ BLAU, Eve and KAUFMANN, Edward (1998). 'Introduction'. In: BLAU, E. and KAUFMANN, E.. *Architecture and its Image- Four Centuries of Architectural Representation*. Centre Canadien d'Architecture / Canadian Centre for Architecture: Montreal. p13

¹³¹ COHEN, Jean Louis (2001) 'Models and the Exhibition of Architecture'. in: FEIREISS, Kristin (ed.), *The Art of Architecture Exhibitions*. NAI Publishers: Rotterdam. p30

'representation' and not the 'veritable object' one has to ask: *What is architecture?*¹³²

Architecture as medium, the medium as architecture

The Oxford English Dictionary defines architecture as 'the art or science of building or constructing edifices of any kind for human use [...]; the action or process of building [...]; architectural work; structure, building [...]; the special method or 'style' in accordance to which the details of the structure and ornamentation of a building are arranged. [...]; construction or structure generally'¹³³.

What this definition excludes, maybe not surprisingly, is the Marxian concept that the product, architecture, can only become complete through its consumption. *The Oxford English Dictionary* definition excludes both the distribution/mediation as well as the consumption/use of the product. One could argue that the incentive behind this definition is again a legitimisation of the established institutional profession as it describes what 'architects do'. It is asserted, that what they do must consequently be architecture¹³⁴. 'The art or science of building or constructing edifices of any kind for human use' is, on the other hand, as a definition almost limitless as it would include any practice that leads to the erection of a built structure. And while programmatic or polemical statements such as Hans Hollein's '*Alles ist Architecture / Everything is Architecture*'¹³⁵ were (and are) important in their challenge to brake away from existing restraining preconceptions of architecture and to broaden the architect's operational field they do not help us here in the historical and contemporary contextualisation of the term.

What this thesis disputes in particular is the exclusive equation of architecture with 'building'. It makes the assertion that this is both historically wrong and theoretically deceiving. The thesis follows here an argument explored by Jean-Louis Cohen who

¹³² See also BALLANTYNE, Andrew (ed.) (2002). *What is architecture?* Routledge: London; New York. and SHEPHARD, Paul (1994). *What is architecture? : an essay on landscapes, buildings and machines*. MIT: Cambridge, Mass.

¹³³ *The Oxford English Dictionary*, Second Edition (1989). Clarendon Press: Oxford.

¹³⁴ The argument here would be that bias towards the realized project on behalf of the professional bodies lies in the circumstance that access to these bodies is only granted once one has proven a comprehensive involvement in the building process (no matter if the structure has actually any architectural merit). Everything outside this building activity is per professional definition not architecture.

¹³⁵ HOLLEIN, Hans (1968). 'Alles ist Architektur' in: *Bau 1/2*. p2. reprinted in: OCKMAN, Joan (1993). *Architecture Culture 1943-1968 – A Documentary Anthology*. Columbia Books of Architecture/Rizzoli: New York. p460

refers to the distinction made in the French legal and political system between the architectural *oeuvre* and the architectural *ouvrage*. He writes: 'The definition for the act of building that is common in France is instructive [...] as it makes the difference between the executed building (*ouvrage*) and the building design (*oeuvre*), that is the intellectual anticipation or vision of a building' [author's translation]¹³⁶. In that respect, the *ouvrage*, like the *oeuvre*, is part of architecture. It is not synonymous with architecture.

This distinction is crucial as it gives an answer to the question whether that what is exhibited in architectural exhibitions is architecture or a mere depiction of it. And while, in most cases, the exhibition will not exhibit the actual *ouvrage* or the building, it is most certainly the *oeuvre*, the intellectual construct that is presented. Yet to understand the nature and origin of the concept *oeuvre* and its distinction from a built object one has to again go back to the historical emergence of the 'intellectual anticipation and vision' within the realm of architectural production.

In Chapter 2 we have established that the separation of the emerging Renaissance architect from the *teatro* or building site led to the severance of congruence between architecture and building that still existed in the Medieval building lodges. This change affected also the object – architecture – and in consequence the focus of architectural production shifted, although not exclusively, towards the intellectual and artistic construction and deliberation of architecture. With the Renaissance architecture is no longer synonymous just with building but architecture becomes an 'embodiment'¹³⁷ of scientific, historic knowledge and cultural memory. Architecture becomes an intellectual idea rather than material construct.

According to Platonian philosophical thought an *idea* would describe an eternally existing pattern of which all material, individual things are mere imperfect copies¹³⁸. A building would therefore be an imperfect copy of the architectural idea. One could add that all material manifestations of this idea, from the drawing to the model and the

¹³⁶ COHEN (2004). p7

¹³⁷ Millon uses the term 'embodiment of the idea' in conjunction with the emerging models that were increasingly used in the 15th Century. see: MILLON, Henry .A. (1994) 'Models in the Renaissance' in: MILLON, H.A. and LAMPUGNANI, V.M. (eds.). *The Renaissance – From Brunelleschi to Michelangelo – The Representation of Architecture*. Bompiani: Milan. p22

¹³⁸ For Kant an *Idea* would be based on 'pure reason' and as such be opposite to empirically based experience. That this detachment from experience should become problematic as it led to static academism and finally a dead end in the development of, not only, architecture will be referred to again in PART II, Chapter 5.

building are in effect imperfect presentations of it, as they could only be approximations of the geometrical laws or laws of proportion and perspective underlying the architectural *disegno* devised by the Renaissance architects.

Forty underlines architecture's relation to the realm of the 'perfect' idea when he writes that the 'drawings connection with geometry in the newly discovered science of perspective gave architecture a means to associate itself with abstract thought'. In consequence architecture gained the 'status of intellectual rather than manual labour'¹³⁹. While this division into 'intellectual and manual labour' relates with Cohen's remarks about the distinction between *oeuvre* and *ouvrage* it is also interesting to note that the shift of focus in the architectural production and consequently in the understanding of architecture itself is linked to the emergence and development of a new medium.

Thoenes makes a similar point when he states that Renaissance architecture, drawing once again on antiquity, was, in contrast to Gothic, 'an idea which did not arise from actual everyday construction practices but rather in spite of them'¹⁴⁰. While the master builders of the Gothic involved in the building lodges would draw their inspiration from a continual tradition of constructing buildings, the last building always acting as reference for the next, the Renaissance architects would have to be involved in a scholarly scientific and cultural discourse that 'required defining, argumentation, language and finally the written word'¹⁴¹.

Thoenes's argument is directed towards the written word and in particular the treatise that should become one of the crucial media for the Renaissance architects to explore and mediate their ideas. A quintessential quote that would reflect this argument is a remark made by Adolf Loos in his essay 'Regarding Economy' from 1924. He writes: 'I have no need whatsoever to draw my design. Good architecture [...] can be written. One can write the Parthenon'¹⁴². Forty on the other hand, and in a similar line of argument also the aforementioned Anstey, focus on the *disegno*, expressed through the drawing as crucial new media of architectural production. Both arguments are

¹³⁹ FORTY (2004). p30

¹⁴⁰ THOENES (2003). p10

¹⁴¹ Ibid.

¹⁴² LOOS, Adolf (1924). 'Regarding Economy' in: RISSELADA, M. (ed.) (1988). *Raumplan vs Plan Libre*. Rizzoli: New York. p139

combined in Bernhard Tschumi's statement that 'Architecture does not exist without drawing, in the same way as it does not exist without text'¹⁴³.

Kester Rattenbury states in the introduction to *This is not architecture* that 'there is a strong argument, probably even a historical one, that architecture – as distinct from building – is always that which is represented'¹⁴⁴. She continues with writing that 'architecture is discussed, explained and identified almost entirely through its representations. Indeed, these representations are often treated as though they were architecture itself'¹⁴⁵. There is a slight ambiguity and difference in these two statements. While the former asserts that architecture *is* that what is represented the latter statement claims that the representation is *treated as though* it was architecture. One could argue that the incongruence of the two positions stems from her assertion that 'architecture is fundamentally concerned with physical reality, yet we discuss and even define architecture (as opposed to building) through an elaborate construct of media representations'¹⁴⁶.

However, we have established in the previous sections that architecture, in contrast to building, is not 'fundamentally concerned with physical reality' but with the possibility or proposition of such a physical construct. Architectural media are therefore not only representations of a material architecture. As material expressions of the architect's intellectual idea, the media of architectural propositions, whether drawing or architectural model or indeed building, have to be regarded not only as means of mediation but as architecture as such.

Architectural media

But what are these architectural media and how did they historically come about? How did they develop? How were they appropriated for public mediation? And how did they find their way into the architectural exhibition? We can establish several categories of architectural media through which architecture is communicated from a producer to a recipient or consumer. These categories can also be grouped in various ways.

¹⁴³ TSCHUMI, Bernhard (1981). *Architecture and Disjunction*. MIT Press: Cambridge, Mass. p102

¹⁴⁴ RATTENBURY, Kester (2002). 'Introduction'. In: RATTENBURY, Kester (ed.) *This is not architecture – Media Constructions*. Routledge: London. pxxii

¹⁴⁵ Ibid. Back-cover abstract

¹⁴⁶ Ibid.

Architectural media range from the two-dimensional to the three-dimensional, from the static to the ephemeral, from image to object to text, from media that are of importance in the primary production process of architecture and those that are only used in retrospect to represent an already existing architectural construct. Generally speaking one can assert that the means of mediating architectural ideas and theory developed from the word to the image to (physical) model and finally to the life-size installation.

Eve Blau and Edward Kaufmann make a similar list in their introduction to the exhibition catalogue *Architecture and its Image*. They first mention the 'standard orthographic set that evolved in the Renaissance – plan, elevation, section'. They then continue with '... other types of architectural representations [that are] ... sequential ... simultaneous (and hence) incremental and cumulative ... linear and narrative ... experiential ... temporal ... comparative'. They further include 'other types of architectural representations composed of groups of interrelated images [such as] film, video and computer imagery'. Blau and Kaufmann finally conclude that 'the concept can be extended to include almost any book, magazine, or catalogue – or for that matter, any exhibition, collection, or architectural archive'¹⁴⁷. The range of architectural media that Blau and Kaufmann present here is of interest for this thesis as much as it bridges from the drawing to the architectural exhibition. Their omission of the model, or any other three-dimensional media for that matter is curious, but might be explained through the scope of the actual CCA exhibition that concentrated solely on the architectural image.

A categorisation that Blau and Kaufmann do not make in their catalogue but which the author considers of paramount importance concerns the actual function of the architectural media. In that respect one can distinguish two different kinds or categories of architectural media. These are media that either present or represent architecture. In the first category are those media that are used within the original process of the architectural production. They are means of presenting architecture – in effect they are architecture. They include the sketch, the drawing, the architectural model, but also the building. In the second category are those media that are used to reflect on the architectural product. They are means of representing architecture. They include painterly forms of representation like the *vedute* – a mostly panoramic view of one or several buildings in their actual setting - or the *capriccio* – a scenic collage of existing buildings and ruins. From the 19th century onwards this includes also the photograph. Further they include also the three-dimensional miniature cork model and the cast. The

¹⁴⁷ BLAU and KAUFMANN (1998). pp13-15

treatise or critical text would take a role in between these two functions, leaning either more to the former or the latter.

The difference between the media of presentation and those of representation is critical. In the case of the medium that is presenting architecture, the 'exhibit' / presentation is part of the subject-matter – architecture. Additionally, presentation refers to or represents the producing subject, either the architect, the patron or builder. In the case of the medium that is representing architecture on the other hand, the exhibit refers only to the object – to architecture. It does not represent the subject or original producer. (In the case of the *vedute* painting it certainly represents the painter. But it does not represent the architect of the depicted building.) However, both media of presentation and media of representation play a role in the production of architecture. Similarly, both categories have also their function within the architectural mediation. What is however important to note is that their role is at different points within the architectural production process.

One can illustrate this with an example that is also featured in Rattenbury's 'This is not Architecture' essay. Rattenbury takes a 1928 photograph of Mies van der Rohe's *Barcelona Pavilion* and writes: 'Of course this is not architecture. This is a picture. This is a book. Yet it is almost impossible to conceive that a photo of the Barcelona Pavilion, on the front of an architectural book, is not architecture. As with Magritte's painting *This is not a Pipe*, it's hard to accept the construct – that what we are looking at is a representation and not the thing itself'¹⁴⁸ [See Figure 8]. The question however is if the reference to Magritte's painting is accurate here. Magritte didn't say: *This is not Art* or *This is not a Painting*. In reference to Mies' pavilion, *This is not a Pipe* would rather translate into 'This is not a Pavilion'. And then, yes, we would have to acknowledge that we are looking at a photograph of a pavilion. It is rather the representation through the means of a photograph that makes this issue more complicated. It is not the fact that we are looking at a representation of the physical reality that is creating the problem. It is the photographic medium itself. Would we see a drawing or a collage by Mies of his Barcelona Pavilion we would undoubtedly say 'This is Architecture'. Yet, the photograph that was made after the completion of the pavilion, and which acts today as one of the sole surviving records and representations of the original building, had no purpose in the original architectural production.

¹⁴⁸ RATTENBURY (2002). pxxi

The photograph of the pavilion, however, played its part in a secondary process of creating architecture. Taking the photograph and selecting a specific view for publication acted as an ideological filtering process, steering the perception of the architecture towards carefully selected aspects of it. This selection process and the perception of the pavilion through the photograph changed the original object or architecture. In this respect the photograph and its presentation, in book form or in an exhibition, became part of the architectural production process long after Mies' pavilion had been destroyed.

The distinction between media of presentation and representation is not always easy and apparent. Rattenbury points out that the means of representation derive from the 'codes of the architect's first virtual representation'. They are therefore often difficult to distinguish from one another and it is necessary to question the imagery or indeed the text in regard of the purpose for which they had been originally produced. The reason why it is crucial to make a distinction between the forms of presentation that are used in the primary process of creating architecture and the forms of representation that are used to mediate the project is that only the former can actively be used by the architect to explore and produce architecture. In that respect only the media of presentation can be used in the context of an exhibition to develop and test a new architecture. This is, as we shall see, a crucial factor in the use of the architectural exhibition as a laboratory.

The architectural drawing

Rattenbury asserts that 'architectural drawing evolved for description, not construction'¹⁴⁹. This argument would be in line with the earliest depictions of, for instance, architecture in religious iconography¹⁵⁰. Yet the crucial step towards the propositional media or media of presentation comes with the further development of the architectural drawing during the Renaissance in Italy. From the Renaissance onwards the drawing should become as much a blueprint and instruction according to which a building would later be realized as it became a means to mediate ideas. The drawing thus became both instrument and medium. Phyllis Lambert makes a similar comment when she writes that 'drawings are projections through which architects

¹⁴⁹ Ibid. pxxii

¹⁵⁰ It is, however, also a general cultural moment of human culture and activity. Human activity has almost always been first described through drawings and not projected by them. These drawings or pictures are accounts of things seen or experienced. Cave paintings depicting a hunt being maybe the very first of such examples.

visualize, test, and order imagined relationships'¹⁵¹. The drawing becomes a construct for a spatial proposition that is, at least, imagined to be a possible physical reality.

The importance of the drawing has been already explored in relation to the emergence of the three interdependent figures of the architectural production process that had been first described by Alberti. Through the separation into architect/designer, builder, and patron, or as Adrian Forty calls it the 'new division of labour'¹⁵², means of mediation between these three figures had to be established that allowed for an exchange of architectural ideas. We have also already established that the architectural drawing developed a function beyond that of the blueprint for construction.

The drawing should become one of the primary means for the architects to present their artistic and intellectual command over the subject-matter. Forty argues that 'what above all set the genus of architects apart from the building trades was their command of drawing' and that the drawing remained 'the only part of the building process over which the architect retained absolute and exclusive control'¹⁵³. One could argue that the reference to the building process seems limiting and misleading here as many designs and their drawings do not 'enter' the building process. Nevertheless, it confirms the role of the drawing for the architect. It also hints at the necessity to make these new forms of drawings public in order to gain the social recognition that the Renaissance architects were aiming for.

How important the Renaissance architects regarded the drawing, and the perspective in particular, can be seen in the numerous explorations about them in the then emerging architectural treatises. Forty supports this argument when he writes that 'many of the Renaissance treatises, from Filarete onwards, laid particular stress on the importance of drawing as the first skill to be acquired by anyone aspiring to be an architect'¹⁵⁴. Forty further argues, that it was precisely 'drawing's connection with geometry in the newly discovered science of perspective, [that] gave architecture a means to associate itself with abstract thought, and thereby give it the status of intellectual [and one might add artistic], rather than manual labour'¹⁵⁵. The drawing

¹⁵¹ LAMBERT, Phyllis (1998). 'Foreword'. In: BLAU, E. and KAUFMANN, E. (eds.). *Architecture and its Image- Four Centuries of Architectural Representation*. Centre Canadien d'Architecture / Canadian Centre for Architecture: Montreal. p9

¹⁵² FORTY (2004). p30

¹⁵³ Ibid.

¹⁵⁴ Ibid.

¹⁵⁵ Ibid.

becomes since then a means of expressing a division between intellect and skill [See Figure 9].

Pevsner et al make a similar argument in regard of the perspective. For them it acts as the 'decisive foundation of the architectural imago'¹⁵⁶ [author's translation]. But the perspective is not only important in the 'independent' genre of the architectural imago. It is even more essential in the development a new spatial understanding in architecture as a quote by Serlio, cited by Forty, illustrates. Serlio writes at the beginning of *Book II* that: 'perspective would be nothing without architecture and the architect nothing without the perspective'¹⁵⁷. The discovery of the science of perspective allowed architects to explore through the drawing new spatial constructs. Architecture was perceived and seen perspectively. Architecture was finally designed in order to experience the perspective that was previously explored through the medium. One could argue that the paper on which the perspective emerged acted as a kind of laboratory for the perspective spatial experience to come.

The architectural treatise

Linked with the above-explored development of the two-dimensional media of the drawing and the perspective the Renaissance witnesses the emergence of another important medium in the process of distributing or mediating architecture to a professional and general public. This medium is the architectural treatise. The drawing should here play a role both as an illustrative means accompanying theoretical texts as well as be the very a topic of these texts.

While the drawing was one physical manifestation of the architect's intellect, the architectural treatise should become another one. And as the drawing or *disegno* acted as a representation of the architect, making public his knowledge and artistic skill, the theoretical treatise was even more predisposed to act as such a representation. Throughout the 15th to 18th century the architectural treatise would remain the principal theoretical medium for architects to make their architecture public. Thoenes argues in this respect here that 'the social function of the treatise was that it established a new level of communication between the architect, the client and the general public'¹⁵⁸.

¹⁵⁶ PEVSNER, FLEMING, HONOUR (1987). p36

¹⁵⁷ FORTY (2004). p30

¹⁵⁸ THOENES (2003). p12

The architectural treatise had two functions. Firstly, it had a projective function as it could be read as instruction for an emerging architecture. Secondly, it had a reflective function as it established a historical reference and lineage for this new architecture. The wide distribution of architectural knowledge and propositions through the treatise was yet further enhanced by the invention of a new production technique – the printing press. This allowed for the now relatively cheap distribution of books rather than for the hand copied books being confined to secluded libraries of the ruling classes. Thoenes even calls the architectural treatise a 'weapon in the battle to making public the well-guarded knowledge of the hierarchies of feudal societies [...]' and he refers in that context to 'the printing press [that] was invented at the same time as the architectural treatise'¹⁵⁹. Architects could thus present their work and thoughts to an audience reaching far beyond the public that existed before.

The development from the only verbally and secretly transmitted knowledge about architecture as it existed in the Middle Ages to the first scholarly and later popularly written elaborations about historical and contemporary architecture and finally to the parallel existence of written word and illustration leads the way to an ever increasing intellectual exchange between the original producers of architecture and a wider audience. In regard to the architectural exhibition the treatise plays a decisive role in popularising architecture as a subject-matter and thus preparing a wider audience for such exhibitions. Furthermore one could argue that the architectural treatise acts as sort of linear 'architectural exhibition' in its own right. The presentation of architectural elements, topics and the representation of exemplar historic architecture is not dissimilar to the content many educative architectural exhibitions should have in later years.

The architectural model

In the history of mediating and exhibiting architecture, either temporarily or permanently, the model enters the scene roughly at the same time as architecture becomes an independent pictorial subject in late medieval and early Renaissance paintings. The architectural model, like the drawing, follows here the logic of a necessary abstraction and reduction in which the complex reality of an existing building or imagined design has been deducted of formal and programmatic elements. As such, the model contains a physical or tangible and, in many cases, artistic quality that make

¹⁵⁹ Ibid. p13

it one of the preferred media in the mediation of architecture and the architectural exhibition in particular.

We have already explored the two different categories of media – media of presentation and media of representation. Similarly, one can distinguish between two fundamentally different categories of architectural models. There are those that play a role in the original production process of architecture. They are models that serve, besides the architectural drawing, as physical manifestations of architectural ideas in order to support the production process of architecture. They range from earliest sketch-models, to detailed models exploring certain aspects of a design, presentation models, models to test or illustrate a construction technique, or models in a 1:1 scale placed at the actual building site to test or promote the building. Secondly there are those models that depict or represent existing, in some cases also imagined, architecture for purposes such as curiosity and amusement, education or the demonstration of power. These models range from earliest architectural miniatures of churches held by patron saints, to the 17th and 18th century cork models of Roman antiquities [See Figure 7, left], scaled city models, casks, or explanatory cut-away models in museums. In relation to the Laboratory Exhibition, we shall here only deal with the former category, the model of presentation that is used in the primary production process of architecture.

Jacob Burckhardt¹⁶⁰ argues that the use of the model within the process of designing, presenting and building architecture is first recorded in Italy. He writes: 'While in the rest of Europe the architectural drawing ... sufficed, in Italian architecture the model held the stage'¹⁶¹. From the fifteenth century onwards, starting with Brunelleschi in Florence, the architectural model became a common means in the architectural production process as the new formal canon of the Renaissance had to justify its yet unfamiliar appearance to the public. The 'intrinsic laws'¹⁶² of the model as Burckhardt calls them were particularly suited for such a presentation. He further explains that

¹⁶⁰ Jacob Burckhardt, (1818-1897). As art and cultural historian, one of the most important scholars on Italian Renaissance in the 19th century. It is Burckhardt's achievement to look at the High Art and High Culture of the Italian Renaissance not in isolation but to put it in social context and relating it to the everyday life.

¹⁶¹ BURCKHARDT (1962). p77. The English translation is rather clumsy and does often not reveal Burckhardt's subtle and poetic use of language. The German original of this passage reads: 'Während im übrigen Europa der Bauriß ... genügt, tritt in der italienischen Baukunst das Modell in den Vordergrund. ... Das Modell der Italiener ... zeigt kubisch, wie die Räume sich innen und außen gestalten, teilen und folgen sollen und welches ihre große plastische Gesamterscheinung in Luft und Licht sein wird.'

¹⁶² Ibid.

'[through] the model the Italians ... demonstrated three-dimensionally how the rooms are to be shaped, partitioned, and disposed inside out, as well as the overall appearance as it would be in the light of day'¹⁶³.

This is supported by Mosser who argues that 'from the beginning, the dual function of the models emerges. On the one hand it serves the creative process and on the other hand it is supposed to be an immediate comprehensible means of communication with non-specialists'¹⁶⁴. However, according to Burckhardt the use of the model is not so much a tool for the architects themselves but rather an account to the client 'in order to stimulate the latter's imagination at a time when every major building implied a striving for originality, for the exceptional, and indeed for the colossal'¹⁶⁵.

The first instances where these Renaissance models would find not necessarily a bigger audience, but one that exceeded that of the professionals and scholars are the already mentioned architectural competitions that were held during the fifteenth and sixteenth century in Italy. While the models would have been shown before to a commissioning client, in most cases either the prince or the church, they now went also on a temporary public display. Burckhardt mentions several such competitions where models played a significant role in winning a commission for a building. He writes that: 'Francione, lignarius [...] submitted a model in the competition of 1491 for the new façade for Florence Cathedral, when all the forty-five others only produced drawings'. And further, 'for the *tiburio* of Milan Cathedral many masters submitted models in 1490. ... [Francesco di Giorgio] had already been successful in 1486 with his model for the church of the Madonna at Cortona'¹⁶⁶ [See Figure 10].

Yet, whether Renaissance architects did in fact not use the model as a tool in the design and construction process, as Burckhardt claims, is indeed disputable. Brunelleschi, for instance, relied on models for the completion of the Florence cathedral. He made models both for the competition to win the commission for the

¹⁶³ Ibid.

¹⁶⁴ MOSSER, Monique (1981). 'Models of French Architecture in the Age of Enlightenment'. In: *Daidalos* No.2 Architektur als Schauobjekt – Architecture on Display. December 1981. Bertelsmann: Berlin. pp85

¹⁶⁵ BURCKHARDT (1962). p77. The German term that Burckhardt uses, is '*Ungeheuerem*' which would be better translated as 'the tremendous'. The whole German passage reads: *Es ist eine Rechenschaft, die der Künstler nicht sich selber, sondern dem Bauherrn gibt, um der Phantasie desselben nachzuhelfen in einer Zeit, da bei jedem großen Bau nach dem Originellen, Abweichenden und selbst dem Ungeheuern gestrebt wird; unentbehrlich zumal bei Kuppelbauten und beim Zentralbau überhaupt.*

¹⁶⁶ Ibid. p79

lantern of the cupola (1436), which would support Burckhardt's claim, as well as working models for the workmen of the cathedral *fabbrica*¹⁶⁷. Henry Millon goes further in this argument when he refers to Alberti's position on the drawing and the model in relation to the design process written in the second book of *De re aedificatoria*. He writes that 'for Alberti models have another important function. An idea, or *disegno*, in architecture could only be realized through a model. The idea, as formed in the mind, was imperfect and could only be given its consequent form through examination, exercise of judgement, and modification of the idea through drawings. Further, the drawings were to be assessed, and improved through models, thereby approaching an embodiment of the idea. The model, then, for Alberti, was not a vehicle to present an idea to a client, but a means to study and realize an idea'¹⁶⁸ [See Figure 11].

Same size models and the building site

A special type of presentational models that are used in the primary production process of architecture are 1:1 models. These models, usually of façades or parts thereof, are often erected at the actual location of the proposed building. They try to create a substitute experience that projects into a future. These models are, other than those of smaller scales, not concerned with an abstraction of the design. Their focus rather lays on detail and appearance, colour, scale, and in some cases even materiality. Through their 1:1 scale they allow for the most accurate three-dimensional presentation of a building with temporary means.

Like the propositional models of a smaller scale, the 1:1 models have a dual function. They are means for the producer to develop or test architectural propositions and they are means to present and promote the architectural proposition to a public. This public consists first and foremost of those involved in the production process, namely the client and those engaged in any decision making process. But furthermore, due to the public nature of its presentation, this is also a very general audience that is able to perceive and reflect upon the publicly displayed architectural proposition.

1:1 models start to be used from the 17th century onwards. An account of the use of such models is given by Mosser who quotes the French architectural theoretician Nicolas-François Blondel. In his *Cours d'architecture* he writes that: 'It is known that great architects have more than once, in order to ensure the perfection of their work,

¹⁶⁷ MILLON (1994). p21

¹⁶⁸ Ibid. pp22-23

had models made of the same size as the building, or at least especially important parts, particularly those that would repeat themselves within the building. Bernini did it in this way with the colonnades of St. Peter's Square, Lescot with one of the pavilions in the large courtyard of the old Louvre, Perrault with the triumphal arch of Porte Saint-Antoine, and finally Mansart with the majority of the façade of the castle of Maisons¹⁶⁹.

Mosser highlights several other examples of 'same size models' such as the case of Jaques-Germain Soufflot's design for the new house for Marquis de Marigny in Roule. She writes that 'a draft of the façade [had been] drawn in full size in front of the old buildings on a plaster rough cast that [Soufflot] had ordered for that purpose'¹⁷⁰. Jacob Burckhardt equally mentions the technique of same size models to test new architectural motives for façades or parts thereof. He writes that: 'The preparation of a simple element of a building "in the same size" essentially follows Michelangelo's example in the making of the crown for the *Palazzo Farnese* in Rome'¹⁷¹.

The above indicates that use of the same size model is twofold. On the one hand it acts as a means to present a part of the architectural project to a client or indeed the wider public in order to get their approval for the final construction. On the other hand they offer the architect the opportunity to experiment with the proposed building prior to its actual construction. The size of these models and their testing in situ make them inevitably exhibits in a more or less public realm and can thus act as a laboratory exhibition.

The architectural installation

Related in size to the aforementioned same-size model is the architectural installation. The following passage will argue that one can regard the installation as an element within the architectural production process that is used to convey certain architectural ideas and can thus be regarded as an architectural medium in its own right. While the thesis will come back to several concrete examples of installations that are acting as architectural laboratory in PART II, Chapter 7, we will here explore the nature of this medium and make a distinction to the related art installation.

Although there is evidence for installations being used as part of the architectural experimentation for the last five hundred years one can hardly find any definition of the

¹⁶⁹ MOSSER (1981). p88

¹⁷⁰ Ibid.

¹⁷¹ Ibid. p95

concept of the architectural installation. Moreover, all definitions that exist of the term and concept of 'installation' are related to the art installation. One of the reasons being that installation art has undoubtedly become one, if not the foremost contemporary art form over the last twenty years. Yet what we call 'installation art' encompasses today a vast variety of practices - from the most inconspicuous interventions in the shop window of a back street gallery to media-hyped spectacles in Tate Modern's Turbine Hall¹⁷². One could paraphrase here Rosalind Kraus and state that the term 'installation' has been 'forced to cover such a heterogeneity that it is [...] in danger of collapsing'¹⁷³ as a category. Or, as the *Guardian* columnist Stuart Jeffries proclaimed (somewhat apologetically) in his attempt to explore the notion and concept of installation art: 'Installations [...] are a big, confusing family'¹⁷⁴.

But while the art installation might be indeed characterised through its heterogeneity there are nevertheless several common principles that define it and apply to almost all installation art. This thesis wants to maintain that the architectural installation is actually a discrete category in its own right and, although definitely related, quite distinct from the art installation. To establish this distinction and in order to provide a provisional definition of the architectural installation it seems necessary to first summarize the key principles of the art installation. These principles include site specificity, spatiality, engagement of the viewer, and temporality¹⁷⁵.

Site specificity – Installation art is conceived and installed within a space or site that

¹⁷² For further reading on Installation Art see also:

BISHOP, Claire (2005). *Installation Art – A Critical History*. Routledge: London

DE OLIVEIRA, Nicolas (2003). *Installation Art in the New Millennium – The Empire of the Senses*. Thames&Hudson: London

REISS, Julie (2000). *From Margin to Centre: Spaces of Installation Art*. MIT Press: Cambridge, Mass.

ROSENTHAL, Mark (2003). *Understanding Installation Art – From Duchamp to Holzer*. Prestel: Munich

SUDERBURG, Erika (ed.) (2000). *Space, Site, Intervention – Situating Installation Art*. University of Minnesota Press: Minneapolis

¹⁷³ KRAUSS, Rosalind (1979). 'Sculpture in the Expanded Field', *October*, Vol. 8 (Spring). p33

¹⁷⁴ JEFFRIES, Stuart (2001). 'When is a room not a room?' *The Guardian*, Saturday November 24, 2001

Jeffries article was part of a series of explorations on contemporary art forms and referred in particular to, then, most recent Turner prize nominations.

¹⁷⁵ Author's own categorisation. I have excluded here 'rejection of marketable object' that was a main principle behind a most of the early installation art in the 1960s and 1970s. The development of environments, happenings, performances and art installations in that period was, at least partly, driven by an ideological opposition to the commodification of the art object. However today, artists, art institutions and the art market have developed techniques and procedures to easily include installation art into the prevailing commodification process.

provides its specific, often pre-existing, framework. This space or site is usually an interior within a gallery or museum environment and the installation responds – affirmatively or transformatively – to the given institutional, cultural, social or spatial context. In many cases the installation transforms the spatial qualities of its site and the relation between site/space and the installation might become indeed so close that both merge into one another and their distinction is dissolved.

Spatiality – Installation can only function in space and in relation to space. A development that may have tentatively started when Tatlin's 1914 *Corner Counter-Relief* 'left' the wall to venture into the space led to art installations that create new spatial relations in existing spaces or in fact construct their own space altogether [See Figure 13]. While the painting is a two-dimensional tableau in front of us, and the sculpture a three-dimensional object around which we can walk and look onto, the installation is a work within which we are and through which we can (potentially) move.

Engagement of the viewer – Closely linked with the previous principle, spatiality, is the integration of the viewer into the installation. Installations invite the viewer to become active and experience the installation. In many cases they immerse the viewer to step out of the role as spectator and to become an actor or participant within it – an artistic strategy that Michael Fried calls (disapprovingly) the 'theatricality of art'¹⁷⁶. By allowing or providing for the 'participatory' inclusion of the viewer within the work, installations deliberately incorporate the element of subjective perception, even transformation, into the art practice.

Temporality – While a painting or a sculpture remains painting or sculpture no matter whether they are in the artist's studio, an exhibition or in museum store room, the installation ceases to exist as an installation once it is taken out of its site specificity and spatial context. It is only an installation as long as it is installed, as long as it is in position. In that respect, it is not so relevant that art installations were, in the beginnings of this art form, mostly conceived as very temporary events and are now, after being absorbed by the museums' collections, often more or less permanently on exhibition. This does not alter the fact that they have an inherent temporality that defines them.

¹⁷⁶ See here: FRIED, Michael (1997). *Art and Objecthood: Essays and Reviews*. University of Chicago Press: Chicago. Fried's essay 'Art and Objecthood' was first published in *Artforum* 5 (June 1967), pp12-23. A contrary position that endorses the viewer as active agent within the art work can be found in BOURRIAUD, Nicolas (2002). *Relational Aesthetics*. Presses du réel: Dijon

While these four principles of don't fully describe the complex notion of installation art¹⁷⁷, they show, however, the close relation that exists here with architectural principles, namely site specificity, spatiality and the active role of the viewer (user)¹⁷⁸. Architectural installations follow indeed the same, above-mentioned principles that constitute the art installation¹⁷⁹. This close relation is also expressed in Rosalind Krauss' construct of the 'expanded field of sculpture' in which she coins installations of the above described nature as 'axiomatic structures'¹⁸⁰.

And yet, the architectural installation embodies a further crucial principle that justifies establishing architectural installations as a discrete category. The principle in question is that of experimentation. While we can encounter also art works and installation art that, in one way or another, set up an artistic experiment, even create the notion of a laboratory¹⁸¹, this thesis would argue that the experimentation of architecture or by architects follows an altogether different intentionality than that of art installations and artists.

To explore this difference one could take the Russian Constructivists as an example. The Constructivists themselves used the term 'laboratory work' to describe their experiments from 1921 onwards that happened as much in the studios as well as in places of display, namely the gallery exhibition and the theatre. Yet, the crucial point of this 'laboratory work' was that it was not 'undertaken [...] as an end in itself, nor for any immediate utilitarian purpose' as Christina Lodder writes, 'but with the idea that such experimentation would eventually contribute to the solution of some utilitarian task'¹⁸². Maria Gough speaks here of the difference between the 'pure experiment' and the

¹⁷⁷ On installation art see for instance: DE OLIVERA, OXLEY, PETRY (1996). *Installation Art*. Thames & Hudson: London. and BENJAMIN, Andrew (ed.) (1993). *Installation Art*. Art & Design Profile, No.30. Academy Group: London

¹⁷⁸ The indebtedness of installation art to architecture and appropriation of architectural principles into art is an aspect that has so far been neglected in most histories of art installations. Peter Osborne speaks here of the 'architecturalisation of art'. But whether this leads indeed to a 'reduction of architecture to art' remains questionable. (OSBORNE, Peter (2001) 'Non-places and the spaces of art' in: *The Journal of Architecture*, Vol. 6, No. 2. p186)

¹⁷⁹ This close relation is also expressed in Rosalind Krauss' construct of the 'expanded field of sculpture' in which she coins installations of the above describes nature as 'axiomatic structures'. See: KRAUSS (1979). p38-39

¹⁸⁰ Ibid. p41

¹⁸¹ An example would be the 1999 exhibition *Laboratorium* in Antwerp, curated by Barbara Vanderlinden and Hans Ulrich Obrist

¹⁸² LODDER, Christina (1983). *Russian Constructivism*. Yale University Press: New Haven and London. p7

'experiment which has a basis in reality'¹⁸³. Accepting the risk that runs with every generalisation, we could ascribe the 'pure experiment' to art or, in our case installation art, and the 'experiment with basis in reality' to architecture.

This is a notion that also calls here on Peter Smithson who writes about the 'real before the real' in relation to the courtly Baroque masques that, just as the exhibitions of the modern avant-garde, acted as confined experimental installations to present and test new architectural expressions, constructions or spatial figurations¹⁸⁴. The notion of the 'real before the real' implies that the experimentation, - the masque, exhibition or installation – is just as much architecture as the built building that the temporary structure might anticipate and 'test' – a position and view on architecture that is shared by the thesis. Similarly to the Constructivists' 'laboratory work' that was directed towards a forthcoming, still unpredictable, utilitarian task, the 'real before the real' of the experimental installation points already beyond the realm of experimentation and toward another, future architecture that would supersede its experimental precursor.

The above already indicates that the architectural installation is not confined to the gallery or museum space, nor does it have to be part of or be an exhibition (in its most common sense). One could argue that the only premise in this regard is that the installation is installed *within* a space. It is conceived in reaction to an existing space and transforms it through its existence. Furthermore, this space can be just as well an interior or enclosed space as it can be an exterior or open yet defined, space. Mayakovskii expressed this already in 1918 when he postulated that 'the streets are our brushes, the squares our palettes'¹⁸⁵.

¹⁸³ GOUGH, Maria (1998). 'In the Laboratory of Constructivism: Karl Ioganson's Cold Structures' in: *October*, Vol. 84. (Spring, 1998). p117

¹⁸⁴ SMITHSON (1982). p62

¹⁸⁵ MAYAKOVSKII (1918). 'Prikaz po armi iskusstva', *Iskusstvo kommuny*, No.1 1918 quoted in LODDER (1983). p48

The architectural significance in this statement lies in the fact that Mayakovskii does not speak of the streets and squares as the mere canvases for the new art and architecture but as the very means to create new spaces for a new society.

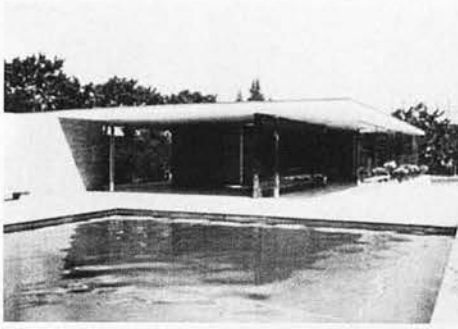


Figure 8: Left: Ludwig Mies van der Rohe, German Pavilion, International Exposition Barcelona, 1929. Photograph of the original pavilion; Right: René Magritte, Ceci n'est pas une pipe, 1926.

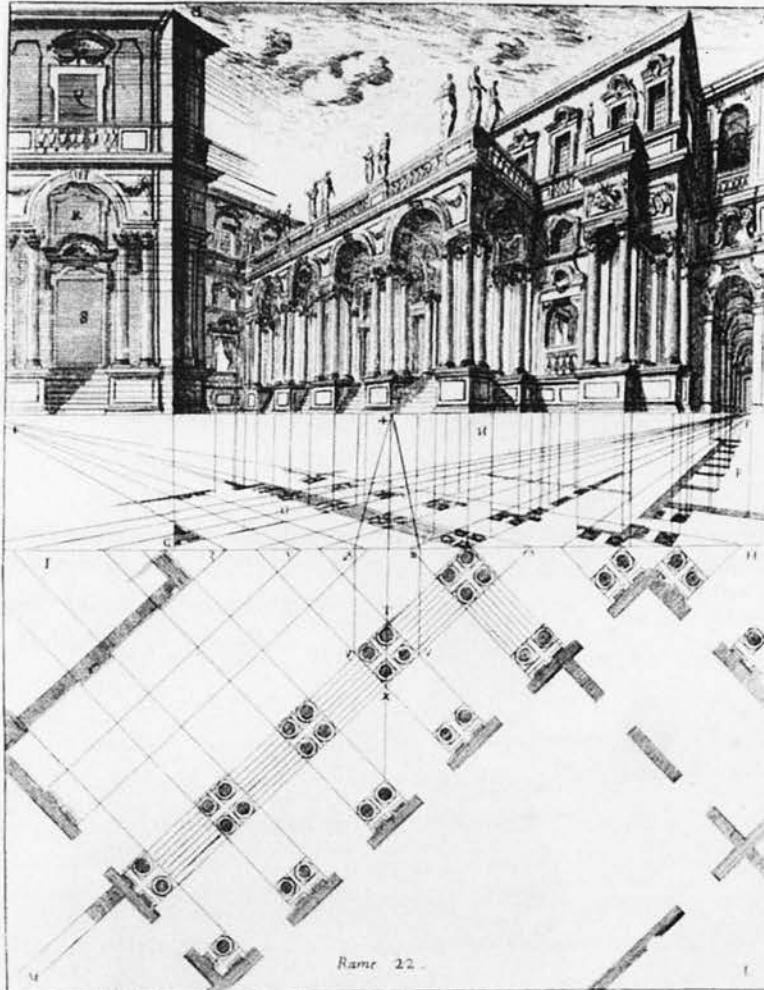


Figure 9: Ferdinando Galli da Bibiena, Scena per angelo, 1711. Purpose of the drawing is not the provision of a building instruction but the skilful demonstration of construction a perspective 'scene'.



Figure 10: Arduino Arriguzi, Model for the completion of S. Petronio in Bologna, c.1515. This model is one example of the elaborate wooden models that were built in Italy in the 16th century for various church projects.



Figure 11: Michelangelo, Design for San Giovanni dei Fiorentini. Michelangelo's design was never executed. The engraving by Jacques Le Mercier, 1607, shows the cut-away-model built by Michelangelo's assistant Tiberio Calcagni in order to develop the scheme.



Figure 12: Albert Speer, 1:1 facade model of the Reichskanzlei in Berlin, c.1938.

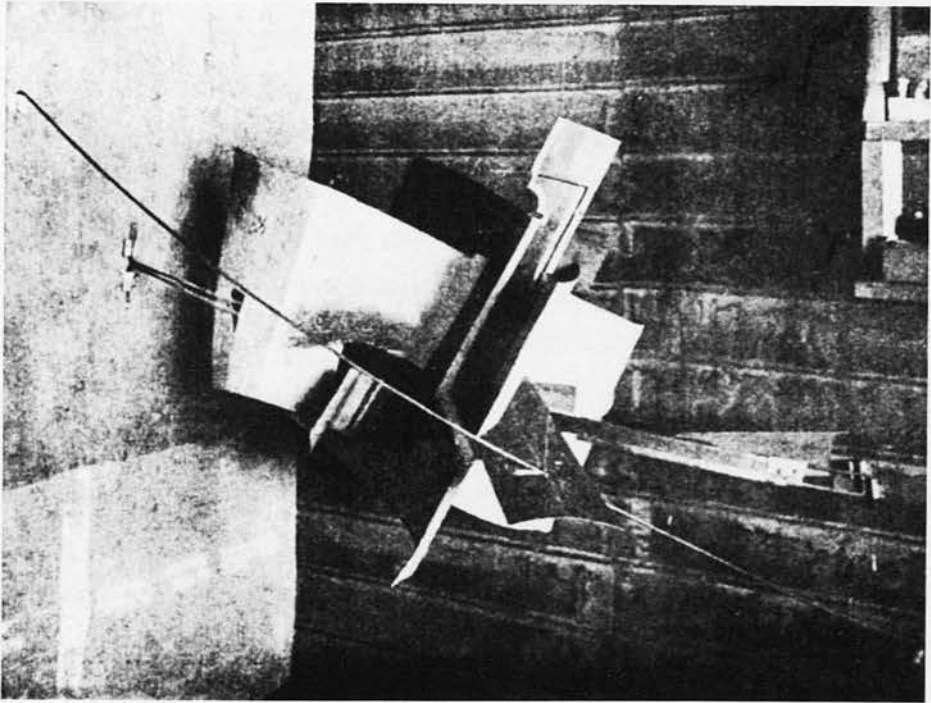


Figure 13: Vladimir Tatlin, Corner Counter-Relief, 1914.

CHAPTER 4 – Exhibiting Architecture

For me, the important exhibition of 1960s was the Architectural Design magazine.

Will Alsop in an interview with the author, 15.08.2005

Shaping an architectural object in an exhibition also means reducing reality.

Jean-Louis Cohen in an interview with the author, 17.08.2005

From the moment, when the drawing was not longer only used as instruction handed over to the builder but a means to mediate ideas architects had to find ways of displaying these new drawings and their architectural ideas. They had to be shown and seen. Media that were developed for this presentation would have been a folio containing a set of drawings, an architectural treatise or indeed an exhibition.

The perception of architecture through its media

Vittorio Lampugnani argues that architecture 'like every conception which is socially engaged [...] demands elucidation, illustration and dissemination. The more seriously it takes its artistic and social obligation, the more tirelessly it seeks to make them better known'¹⁸⁶. This describes as well the role that mediation has to play within the architectural production process. In all these three different but complementary aspects different media have their predominant function. Elucidation will predominantly operate through language. The media here are words and text. Illustration uses the image, whether this is two- or, in case of the model, three-dimensional. Dissemination, finally, refers to the actual process which requires an instrument or locale in which or through which the mediation process can take place.

In all three aspects, however, architects will have to find an appropriate language or expression to mediate their idea to a public that is not necessarily trained in the codes used in a purely professional exchange of ideas. Bart Lootsmaa formulates this in the following way: 'In the building process one can draw on accepted codes and procedures, on people specially educated to propel a project from abstract drawings onto the next phase. What is more, that process largely focuses on the actual construction process, not on the experience the building is designed to evoke, or the significance it seeks to convey, or the wider cultural or social context in which it is realized. [...] Yet, within the cultural context in which architectural exhibitions are

¹⁸⁶ LAMPUGNANI (1981). p30

realized, it is precisely those aspects that are of overriding importance'¹⁸⁷. And Josef Gartner formulates the same thought as early as 1931 when he writes that: 'those who want to win over the public for new [architectural] ideas and the implementation of new rules have to speak with the public in their own language!'¹⁸⁸ [author's translation].

However, what has to happen at the same time is the reciprocal willingness and ability of the perceiving audience to engage with the presented media and its inherent information. Only when the presented subject-matter, when architecture is understood as a social, cultural or artistic concept that one can engage with on an intellectual level and irrespective of its purely functional aspects can architecture become a topic of mediation.

The reflection on architecture as a subject-matter independent from either its production process or its immediate use and functionality, requires a process that is similar to that, which lets us appreciate art. As long as religious imagery was used for worship and loaded with religious connotations the image, as part for instance of an altar, could not be seen as art. The artistic quality was only helping to convey the religious meaning, it was not a quality in its own right. Similar, the medieval cathedrals were first and foremost places of worship. Their architecture was there to serve the religious programme as well as to support a sense of divine space in which one conducts the worship. A twelfth-century visitor would not have regarded the church as architecture. Pevsner speaks here of the 'Fall of Art'¹⁸⁹ that was necessary to recognize art and architecture for their own artistic merit, detached from their original, mostly religious connotation.

The change of this perception changes in the 15th century. Both, painting and architecture underwent here a similar emancipation from their original and immediate relation to function, content and meaning. While those remain valid relations, both, painting and architecture gain an existence in their own right. It is notable in this respect that painting and architecture support each other in this process of emancipation. With the beginning of the 14th century architecture becomes a painterly

¹⁸⁷ LOOTSMA, Bart (2001). 'Forgotten World, Possible Worlds'. in: Feireiss, Kristin (ed.), *The Art of Architecture Exhibitions*. NAI Publishers: Rotterdam. p16

¹⁸⁸ GARTNER, Joseph (1931). 'Nachwort zur Berliner Bau-Ausstellung'. in: *Das Neue Frankfurt*. 8/1931. Reprinted in: HIRNDA, Heinz (ed.) (1991). *Neues Bauen – Neues Gestalten. Das Neue Frankfurt / die neue stadt, Eine Zeitschrift zwischen 1926 und 1931*. Verlag der Kunst Dresden: Dresden. p300

¹⁸⁹ PEVSNER et al. (1987). p437

topic, first in conjunction with religious than worldly topics. Finally architecture would emerge as a painterly topic in its own right.

Necessary for this process of emancipation is distance or detachment between a subject – be it the artist or the viewer – and the object. Distance and detachment are crucial in order to not only see the object but to 'see through' the object – to understand it in all its various layers of meaning. In this way they allow for reflection, judgement and, finally, knowledge. One of the processes through which this detachment can be achieved is the act of exhibiting the object. Exhibiting leads to a detachment between the acting subject – the producer - and the object as much as between a perceiving subject – the viewer/reader - and the object. The painting of a Madonna or the statue of a Roman god in the gallery of a princely palace 'can be seen through' because of their detachment from their original context. The act of exhibiting, allows the viewer to appreciate, judge and value their artistic quality independent from their original religious connotations and meaning.

The same process applies to architecture. Its exhibition, the act of making public, of materializing an idea – through text, drawing, model or building – creates the context in which architecture can be 'read', understood, and valued. Taking the architectural presentations or representations out of their original context and re-arranging them in the exhibition, or indeed in any other form of mediation, re-contextualizes them. Through the selection the exhibits firstly undergo a process of ideological filtering and re-definition. The second process of interpretation and re-definition happens then through the perception of the object or exhibit through the recipient or exhibition visitor.

Through both processes architecture is in effect altered. The architectural production is completed through its consumption. It is important to note that this process of 'architectural production through consumption' is not only relevant in regard of the audience as it includes the recipient, the audience or the user in the production process. But architectural production through consumption is of utmost importance for the architects as well. The act of exhibiting enables architects to distance or detach them from the object in order to be able to reflect upon it and gain knowledge about it. This allows for a process of exploration and refinement that is crucial for the architectural development process.

Mediation of architecture through exhibitions

Within the process of mediating architecture 'exhibiting' is one crucial element. One can argue that in effect every act of mediation through a presented medium is a form of exhibiting. The difference between an architectural drawing put into a folio or being put onto a wall is not a principal one but a relative one. This is also apparent in the official definition of the term 'exhibition' given in the *Oxford English Dictionary*¹⁹⁰. 'Exhibition' is here defined as 'the act of exhibiting, submitting for inspection, displaying or holding up to view', an exhibition is a 'manifestation', a 'visible show or display'¹⁹¹. These first definitions are concerned with a process or action. The definition of the term 'exhibition' further includes also the actual result of that process. An exhibition is defined as 'something that is exhibited, a display, sight [or] spectacle' but also 'a public display of works of art, manufactured articles, natural productions etc.'¹⁹². Exhibition can finally mean 'the place where displays are made'. The definition includes thus a process, a single object, a culmination of related objects and a specific (institutional) space.

When this general definition is related to architecture one can ascertain several specific denotations for both the exhibition of architecture and the architectural exhibition. Any act of mediating architecture through a specific medium can be regarded as an exhibition. The 'submission for inspection' of a drawing or model to a client or a jury could be defined as exhibition. And further, the medium itself becomes an exhibition as it is both a 'manifestation' of an architectural idea and an object that acts as 'display' of some sort. Finally we have those occasions where architectural media – and again this can include the actual building – form a coherent body as a 'public display' within a designated space. The latter definition is probably the most common understanding of the term 'exhibition'. This thesis, however, asserts that it is the wider understanding and the implicit ambiguity in the meaning and use of the term 'exhibition' that is of importance for the development of the 'exhibition as a laboratory'.

Tony Bennett calls the institutions, the individuals and professional bodies as well as the cultural, social and political rituals associated with it, the 'exhibitionary complex'¹⁹³. According to Bennett the 'exhibitionary complex' came to its fullest development in the late 19th century. It exponentially enlarged the number of public exhibitions of all different artistic and scientific disciplines, developed new building typologies to house

¹⁹⁰ *The Oxford English Dictionary*, Second Edition (1989)

¹⁹¹ all: *The Oxford English Dictionary*, Second Edition (1989)

¹⁹² *Ibid.*

¹⁹³ For an exploration of the term and the concept see: BENNETT (1995) pp59-89

these exhibitions and invented modes in which a general public was channelled through and 'educated' in these new institutions. The thesis follows here Bennett's argument which again is strongly influenced by Michel Foucault's discourse on power and the execution of power relations through specific building typologies of the late 18th and 19th century¹⁹⁴.

Yet, before the 'exhibitionary complex' of the 19th century and with it the institutionalised exhibition of architecture to a wider public had been fully established, one can identify certain forerunners of individuals and institutions, spaces, and occasions that would prepare this ideologically and politically motivated system of public exhibitions. The exhibition of architecture beyond the necessity of exhibiting or mediating architecture in the actual production process developed from the earliest private, often princely, collections to public museums and from occasional public displays of architecture to annual exhibition events like the academy exhibitions and even large spectacles like the world expositions. It is not the purpose of this thesis to make an in-depth and comprehensive acknowledgement of all the development strands that lead to the 'exhibitionary complex'. Its several forerunners are however of interest here as they incorporate elements that should play again a role in the later emerging laboratory exhibitions. These elements concern for instance as much the appropriation of not-purpose-built exhibition spaces as the convergence of different artistic and scientific disciplines.

The Laboratory Exhibition is partly characterized through a 'breaking-away' or digression from an established mode of exhibiting architecture. It has thus similarities with forms of exhibiting architecture that pre-date the formation of the 'exhibitionary complex' before these institutionalized modes have been established. As with the earliest laboratory exhibitions that deliberately had to experiment with new forms and means of mediating and in consequence creating architecture, those occasions that pre-date the 'exhibitionary complex' had to test and establish forms and means of the exhibition. One could argue that the exhibitionary complex then only refined and consolidated already existing means of 'showing and telling' and sustained it with a coherent ideology and politico-cultural objective.

¹⁹⁴ See here for instance: FOUCAULT, Michel (1977). *Discipline and Punish – The Birth of the Prison*. Penguin Books: London

As similar argument with a specific relation to 18th and 19th century building typologies is made by Thomas Markus. MARKUS, Thomas A. (1993). *Buildings and Power – Freedom and Control in the Origin of Modern Building Types*. Routledge: London. See here in particular PART III: 'Buildings and Knowledge'. pp169-244.

Temporality of architecture exhibitions

A crucial categorisation that can be made for the early forms and locale of architecture exhibitions is their distinction according to their temporality. This is namely the distinction between temporary and permanent exhibitions of architecture. If an exhibition is used as 'a testing ground in which architectural research is conducted in order to investigate, develop hitherto unimagined, un-tested, and un-established architectural propositions'¹⁹⁵ then 'time' and 'duration' are crucial aspects in conducting this research. The impermanence or limited lifespan of an exhibition, in combination with its spatial and economic limitations, can indeed be used as an advantage for the undertaking of research or the tested architectural proposition. In that respect, the temporary exhibition seems to be more prone to be used as a laboratory than the permanent exhibition. A permanent exhibition, on the other hand, seems through its very nature of being exhibited over a very long, often indefinite, period in incongruity with the experimental aspect of the laboratory exhibition. To a certain extend this incongruity between a static permanence and the active experiment to further the development of architecture exists indeed. Most permanent architectural exhibitions will not aim to instigate a potential development but are rather concerned with the display of a past development. Their purpose lays predominantly in reflection on their subject-matter, not in its projection and they will rather foster the status quo than challenge it¹⁹⁶.

However, as both terms – permanent and temporary – are relative, there is consequently also a terminological and temporal ambiguity in the use of 'permanent exhibition' and 'temporary exhibition'. Even a supposedly permanent exhibition may at some point be changed, dismantled completely or relocated. One could also argue that, over a period of several decades, the same permanent exhibition will be differently perceived, understood, and consequently completed by different generations of exhibition visitors. Thus, even the permanent exhibition changes although its exhibits, the mode of display and the space in which they are presented remain the same. Similarly, temporary exhibitions that could last only a day, a week, a month or as long as even a year are not absolutely defined through their actual temporality. A temporary exhibition, or parts thereof may become a permanent part of a museum or gallery's collection. Further, one could argue that by travelling to several different exhibition venues that even the temporary show can acquire some sort of permanence.

¹⁹⁵ See definition of Laboratory Exhibition in the Introduction

¹⁹⁶ The aspect of fostering the status quo relates of course not only to the temporality of exhibitions but also to their ideological agenda and the power relations that are expressed with in the exhibition and the exhibiting institution. See here in particular: BENNETT (1995).

Yet, the relevant difference between temporary and permanent exhibitions may rather be found in the *anticipation* of their respective temporality or durability at the point of the exhibition's conception and production. For the architect/curator or producer of an exhibition it may not matter – in regard of the anticipated experiment – whether the exhibition will in effect really be temporary or permanent. What matters is if, and in which way, its temporality supports or hinders the conduct of architectural experimentation. And it is in that respect that even the permanent exhibition, at the very time of its conception, has the potential to unveil experimental elements and act as a proposition¹⁹⁷.

The potential of the permanent exhibition to act as a laboratory lays most of all in the production of new meaning by the means of the assembly and exhibition of formerly unconnected and unrelated objects within a new spatial entity. This production occurs on two – not exclusive, but also not necessarily combined – levels. The first level is on the selection of artefacts and objects or in this case architectural media and their relational arrangement to one another. This curation of the objects has to be regarded as a creative act in which potentially new meaning can be produced. The second level is on the actual spatial or architectural integration of the exhibits into an exhibition space. In the extreme the exhibition space itself will be part of the exhibition. Otherwise, architectural devices may be used to enhance or support the curatorial intention or simply to enable the display of the artefacts. In all cases, architecture and the exhibits together can form an experimental system or construct in which the architectural research can be conducted.

Collections and the exhibition of architecture

Permanent exhibitions of architecture are predominantly exhibitions of collections¹⁹⁸.

¹⁹⁷ One could refer here to El Lissitzky's *Kabinett der Abstrakten* at the *Sprengel Museum* in Hannover. Installed in 1928 as a permanent installation and exhibition of abstract paintings, it was indeed an exhibition that could be described as a laboratory. It experimented with new ways of presenting the works by integrating them into the architecture of the exhibition space in order to create a work of abstract art in its own right thus testing new architectural and artistic paradigms.

¹⁹⁸ One has to remember that many of the earliest collections and places that exhibited architecture have done this not in an exclusive manner. Architecture was rather one subject matter amongst many that were displayed within one and the same exhibition. One reason here is that, until the 19th Century, the boundaries between the different disciplines were not as yet defined and varied from our contemporary understanding of the respective disciplines. Decor and sculpture, for instance, were both integral part of architecture before they developed as independent disciplines from the 17th century onwards. Similarly, there are media of architectural representation, like the *vedute*, that belong to the disciplines of fine arts or applied arts but relate nevertheless through their topic, the depiction of architecture, also to architecture.

These collections are either private or, increasingly from the 19th century onwards, public. They are often collections by subjects or institutions that are not involved in the primary production process of architecture. We will however see that through their reflective, evaluating or even critical consideration of their subject matter – architecture – they enter into a secondary production process of architecture as explained above.

A collection is defined as 'the action or process of collecting someone or something', it is 'a group of things or people', or, more specifically, 'an assembly of items such as works of art, pieces of writing, or natural objects, esp. one systematically ordered', but also 'an art museum's holdings organized by medium, such as sculpture, painting or photography'¹⁹⁹. These last two sub-definitions stress the aspect of 'order' and categorization. They entail a system devised according to a discipline or a medium. However, when one looks at the historical emergence of collections one finds that this systematic ordering of collected artefacts has not always prevailed. The categorization of artefacts and objects according to different disciplines and media has only developed after the act of collecting and collections had long been established. Phyllis Lambert for instance, writes that 'architectural material has been collected since at least the early thirteen century'²⁰⁰.

In the case of the subject matter 'architecture' it is mostly architectural media such as models, drawings, paintings, casts etc., and only rarely the actual building, that were and are the objects of a collection²⁰¹. As such they were either formerly used in the primary architectural production process – a maquette used to win an architectural competition for instance – or they were produced as architectural representations referring to an important and valued architecture and/or architect. In both categories the collected object or media can be as much seen as the actual collected object as the architecture it presents or represents. In other words, whether a model is collected because of its craftsmanship, because of the quality of the architectural design or because of its 'historical' importance is often difficult to established. In many cases it will have been a combination, with varying predominance, of all three factors.

¹⁹⁹ *The Oxford English Dictionary*, Second Edition (1989)

²⁰⁰ LAMBERT, Phyllis (1999). 'The Architectural Museum – A Founder's Perspective'. In: *Journal of the Society of Architectural Historians*, Volume 58, No. 3, Sept. 1999. p308
There is no evidence that there existed already in the 13th century a collection that would have 'systematically ordered' architecture and 'organized it by its medium'.

²⁰¹ The collection of entire buildings has obvious physical limitations. However, in more recent years, open air heritage museums have often reassembled historic buildings that were bound to be demolished and lost. One example would be the museum park *Meiji Mura* in near Nagoya, Japan, that was founded in 1965 in order to collect and preserve almost 70 buildings from the Meiji period.

As mentioned above, earliest collections that would find their formal expressions in the 15th and 16th century *studiolo*, in the 17th century *Wunderkammer* and the 18th century *cabinet de curiosités* were amalgams of all sorts of natural objects and artefacts. Architectural media were one, although certainly not major aspect of these collections. Other objects included anything from paintings to technical apparatus, from rare natural species to coins and medals, from valuable foreign essences to religious relicts. While later collections, those of the emerging public museums in the 19th century in particular, are characterized by an ever more specified order or classifying system and a demarcation against other disciplines, it is the cross-disciplinary or better pre-disciplinary nature of the early collections that is also of interest for the laboratory exhibition.

Collections have been and are put together and arranged as overt and public displays for various reasons. One of these reasons is the intimate relation that is established between object and subject, between the collected artefact and collector. Nikolaus Pevsner sees the 'magic-mythical precondition' of the collection related to the 'numinous fascination that radiates from a treasure, from its secret keep (of which one believes that its power will transfer to its owner.)'²⁰² [author's translation]. André Putnam argues similarly in his book *Art and Artifact* when he writes that 'archiving [as one form of collecting] evokes the idea of important, official records which, even if hidden from view or forgotten, may be preserved for prosperity'²⁰³. These two quotes imply that the value of and reason for a collection can be found as much in its symbolical as in its actual monetary value. A collection would here be used to produce and to present power, wealth and prosperity. Dietz and Nutz develop a similar argument when they write that 'until the last third of the eighteenth century, collectors, [...] displayed themselves in front of and for the benefit of their equals in the setting of a competitive, predominantly aristocratic public sphere. The collection was a status symbol'²⁰⁴.

Yet collecting and the collection cannot exclusively be reduced to the notion of a status symbol. According to Walter Benjamin, collecting is also a form of memory and a form to acquire knowledge. He writes in his *Passagen-Werk* that 'collecting is one of the

²⁰² PEVSNER et al. (1987). pp437-438 '*Museumsarchitektur*'

²⁰³ PUTNAM, James (2001). *Art and Artifact – The Museum as Medium*. Thames and Hudson: London. p42

²⁰⁴ DIETZ, Bettina and NUTZ, Thomas (2005). 'Collections Curieuses: The Aesthetics of Curiosity and Elite Lifestyle in Eighteenth-Century Paris' in: *Eighteenth-Century Life* – Volume 29, Number 3, Fall 2005, Duke University Press: Durham (North Carolina). p62

primary phenomena of studying: the student collects knowledge²⁰⁵. [author's translation] And Paula Findlen argues that: 'the authority of the collector was established through the consensus that the amassing of objects forms a decisive step towards the generation of knowledge'²⁰⁶. This is supported by Hanno-Walter Kruft who suggests that the collected architectural objects were used by architects from the 15th to the 18th Century as normative examples in the creation of a new architecture²⁰⁷. Kruft refers here to the new archaeological discoveries that were, before neo-classicism, not published and displayed through casts because of a primary antiquarian interest but because they were used as templates that would produce a normative language of architecture. One of the foremost examples of such collection displays and their relation to creating and re-creating architecture are the sculpture courts as they emerge in the academies.

Both of the above arguments are combined by Bennett when he writes that the earlier collections (*studioli*, *cabinets des curiosités*, *Wunderkammer*, *Kunstkammer*) '[...] fulfilled a variety of functions [namely] the storing and dissemination of knowledge, the display of princely and aristocratic power [and] the advancement of reputations and careers'²⁰⁸. Yet many of the early private collection were also seen as an important source of pleasure and entertainment. Dietz and Nutz refer to this ambiguity when they write that the 'desire for knowledge inspired by the sight of beautiful objects elevated the *curieux* into the status of a *connoisseur* [...]'²⁰⁹. And Lewis Mumford refers, like Bennett, to the genealogical closeness of the places of pleasure and knowledge when he suggests that 'the pleasure garden grew on one stem of the palatial baroque life [while] the museum grew even closer to the main trunk'²¹⁰. In that respect, the

²⁰⁵ BENJAMIN, Walter (1982) *Das Passagen-Werk*, vol.1. (ed. Rolf Tiedermann), Frankfurt am Main, in: Vol. V of *Gesammelte Schriften* (eds Tiedermann and Schweppenhauser) [*Das Sammeln ist ein Urphänomen des Studiums: der Student sammelt Wissen.*]

²⁰⁶ FINDLEN, Paula (1994). 'Die Zeit vor dem Laboratorium: Die Museen und der Bereich der Wissenschaft 1550-1750'. in: Grote, Andreas (ed.) (1994), *Macrocosmos in Microcosmos. Die Welt in der Stube – Zur Naturgeschichte des Sammelns, 1450-1800*. Leske und Budrich: Obladen. p199

²⁰⁷ KRUFF, Hanno-Walter (1991). *Die Geschichte der Architekturtheorie – Studienausgabe*. Verlag C.H. Beck: München. p13-14
This is also reflected in the way these archaeological objects are presented in the early collections. The casts, models or drawings of antiquity are here not shown in accordance to any real historical classification system.

²⁰⁸ BENNETT (1995). p73

²⁰⁹ DIETZ and NUTZ (2005). p54

²¹⁰ MUMFORD, Lewis (1961). *The City in History – Its Origins, Its Transformations, and Its Prospects*. Secker & Warburg: London. p380

distinction between pleasure and knowledge was not as clear as we might expect today.

While all the above is relevant for all sorts of collections one can make the argument even more specific in the case of the architectural collection. Helene Furján, for instance speaks of the multi-layered function of an architectural collection in her essay on Sir John Soane's Museum that 'operated on a variety of levels'. She distinguishes here between its functions as a 'connoisseurial collection' that demonstrates its owners taste; a 'didactic collection' to be used as instruction; an 'antiquarian collection' that would archive and display historical material; and a collection acting as a 'catalogue' of an architectural language or grammar. She concludes that 'above all, 13 Lincoln's Inn Fields was a collection of spectacular spaces designed to leave a lasting impression on the visitor'²¹¹. What function Furján however omits here, is the role of Soane's collections and its purpose-built container, Lincoln's Inn Field, as a veritable experimental locale and operational field in which and through which Soane would experiment with his ideas about architecture. And it is this latter function that should be of paramount interest for us in the development of the Laboratory Exhibition as we will see in the following PART II.

²¹¹ FURJÁN, Helene (2002). 'Sir John Soane's Spectacular Theatre'. In: *AA Files* 47. pp12-22

PART II - Emerging Forms and Locale of the Laboratory Exhibition

The previous part discussed the emergence of the subject of the 'architect'. It established that one could understand the figure of the architect as being divided into distinct but interdependent characters. These characters all play their specific part in the production and mediation process of architecture. The previous part further defined the object – 'architecture' – making the crucial distinction between mere buildings and architecture as a theoretically founded intellectual and physical construct²¹². It has been established that the process of mediation is crucial in producing architecture, whether architecture is understood as intellectual construct or material reality. Finally, PART I dealt with the architect's relation to the means of architectural mediation arguing for a distinction between architectural media of presentation and media of representation of architecture²¹³. Both types of media play different roles in the exhibition of architecture and are therefore also predisposed for different categories of architectural exhibitions.

PART II will explore specific historical moments and locale in the development of the Laboratory Exhibition and examine their potential and relevance for a contemporary exhibition praxis. The thesis divides hereby these locales into three distinct categories that are each dealt with in one separate chapter. Chapter 5 explores those moments and locale that can be summarised under the category 'Places of Production'. Within this category the thesis examines locales which are as diverse as the *museion*, the academies, the *studiolo*, and the architect's studio. Chapter 6 explores locale and moments that can be classified as 'Curated Laboratories', places in which the architectural experimentation is predominantly executed through the act of curating existing architectural material in combination with the creation of a very specific spatial locale. Within this category, the thesis looks at the *Wunder-* and *Kunstkammer*, the *cabinet des curiosités*, the early architecture museums, and architectural biennials. Chapter 7 finally explores the Laboratory Exhibitions in 'Real Scale', including world expositions, building exhibitions, and architectural installations in the public realm.

²¹² This distinction is not understood as evaluating the one over the other. It is rather made to define and distinguish the object of this research.

²¹³ The two different categories are sometimes difficult to distinguish from one another when they are looked at independently from their original functional context. Both different media categories can also transform from one into the other when they are put into a different context. A drawing or model by a specific architect, used within the actual production process either to convince a client or to mediate an idea to the builder, and hence clearly a medium of presentation can, at a later stage, become a medium of representation when it becomes part of a collection and is displayed to represent an architect's oeuvre or a specific period.

In many instances one could have made a case for including a specific locale in another category than the one that it is explored in here in PART II. The thesis does not want to make a case for strict and mutually exclusive classifications of the individual exhibition forms and locales. The thesis rather suggest that each of these three categories implies a set of intrinsic means and methodologies that distinguishes them from the other two and which makes them relevant for the contemporary exhibition praxis.

CHAPTER 5 – Places of Architectural Production as Laboratory

... Neue Aufgabe: Volkshäuser als Vermittlungsstätten aller Künste an das Volk. Ständige Experimentiergelände zur Erprobung und Vervollkommnung neuer baulicher Wirkung²¹⁴.

Arbeitsrat für Kunst

*Is making exhibitions an extension of your architectural praxis?
Oh yes, undoubtedly. To me, everything that one does, is part of the same conversation.*

Will Alsop in an interview with the author, 15.08.2005

It has been stated in the introduction that the Laboratory Exhibition is, per definition, 'a continuation and integral part of the architectural praxis'. The following section will show how architects have used, and are using, various places of architectural production to experiment with 'hitherto unimagined, un-tested, un-established architectural propositions', thus conducting an experimental praxis. While this would in itself not necessarily be of prime relevance for this research, it is rather the notion that these production places are also acting as places of display, thus becoming exhibitions of the laboratory²¹⁵.

The places of production and locale of experimentation that are explored here are the *Museion*; the Academy; the *Studiolo*; and the Architect's Studio. Only two of these locale are in a stricter sense actually places of architectural production, the Academy and the Architect's Studio. However, the other two locale are included here as they provide crucial elements towards the development of the architectural Laboratory Exhibition as it is practiced today.

The *museion* - creation and exchange of knowledge

The term 'museum' derives from the ancient Greek term *museion* or *mouseion*. In Antiquity, the *mouseion* would signify a sacred place or sanctuary of the muses in which the gods and the patron saints of poets, artists and scholars were worshiped. The *museia* were furthermore places in which scriptures, dedicated to the muses, were

²¹⁴ Point 1 in the Manifesto of the *Arbeitsrat für Kunst*, the Worker Council for Art. The *Arbeitsrat für Kunst* existed in Berlin from 1918 to 1921 and comprised of architects, painters, sculptors and writers, among them Bruno Taut and Walter Gropius in: CONRADT, Ulrich (ed.) (1964). *Programme und Manifeste zur Architektur des 20. Jahrhunderts*. Bauwelt Fundamente 1. Ullstein: Berlin. p42

²¹⁵ It is important in this regard to refer back to the exploration of mediation processes within architecture. See Chapter 3, Section 'Architecture as medium - the medium as architecture'.

kept. To some extent the *museion* can therefore also be regarded as the precursor to our modern libraries. The most important and prominent example of Antiquity was the *Museion* in Alexandria. The *museia* were often located within or in relation to schools or clubs of poets and philosophers and consequently became the assembly places of artists and scholars. They would act as places of study and deliberation, of the creation and exchange of knowledge. The museum was thus originally not a place where works of art or artefacts would be kept and shown²¹⁶.

Astrid Legge notices that this original meaning of the 'museum' as signifying an association of scholars was picked up again in the 14th century by the Italian humanists. She writes that the humanists would 'demonstrated their devotion to the muses through expressions like *'musarum amici'*. [But that from thereon], despite the awareness about the varying classical meanings of the term museum, its singular meaning as place to study should prevail' [author's translation]²¹⁷. The term museum would thus often be used for all different sorts of places, institutions, or even publications associated with the purpose of studying. To allow for this study function the museums contained already collections of artefacts and natural objects as well as scriptures. Yet these collections were still not openly presented – neither to the limited audience of the scholars nor to any other public. They were mostly hidden away in cabinets and would only be brought to the fore in order to be temporarily examined and studied as in the case of the early, secluded *studioli* (that are dealt with in more detail below) which were partly also called 'museum'.

The important aspect here in regard of the laboratory exhibition is the *museion's* function as a place of deliberation and study that is predominantly conceived and maintained by the actual producers of art and science or knowledge in general. As such they include already elements that should again be introduced into the museums

²¹⁶ According to Fliedl, Leo von Klenze made this distinction already in 1815 in his design description for the Munich *Glyptothek*. He points out that the Athenian *Museion* had been an assembly place of scholars and artists whereas it were the Roman temples, baths and thermal spas that housed and displayed also pieces of art. Klenze hence concludes that the origin of the museum – in its modern sense – cannot be found in the Greek temple but in the Roman villa or thermal bath. Source: <http://homepage.univie.ac.at/gottfried.fliedl/> [Last accessed: 16.06.2008]

This is also interesting in as much as this would denounce the museum' origin as a 'sacred' place, a place to worship and study. It would rather refer to a place of pleasure and entertainment. The typology of Klenze's *Glyptothek* in Munich does illustrate this interpretation. Firstly there is the arrangement around a central courtyard [in this case not with a pool but with a fountain] that derives from Roman bath and villa architecture – not from a Greek temple [as the Ionic entrance portico might still suggest]. Secondly, the succession of vaulted or domed rooms in which the statues are presented derives from the space layout of Roman baths with their successive rooms for different stages of the bathing process.

²¹⁷ LEGGE, Astrid (2000). *Museen der anderen "Art" – Künstlermuseen als Versuche einer alternativen Museumspraxis*. PhD Thesis, RWTH Aachen, July 2000. pp7-8

of the 20th century by the early avant-garde artists and architects to challenge the 'exhibitionary complex' and the institutionalized museum of the 19th century. But before this would happen, the concept of the museum and consequently the way in which architecture was mediated or exhibited in them underwent several decisive changes. The changes or shifts are instigated and supported by the development of a number of different exhibition places and concepts. These places include the *studiolo*, the *Kunst-* or *Wunderkammer*, and the *cabinet des curiosités*, which are explored in following sections²¹⁸.

Academies – multi-disciplinary vs. institutional orthodoxy

The term and concept 'academy' derives from Greek *academia* which denoted at first 'the groves of Academus'. It was the garden near Athens where Plato taught and henceforth *academia* became synonymous with Plato's philosophical school or thought system and it is this notion as a place of teaching and learning that is of interest here. Academies re-emerged in Renaissance Italy in the 15th and 16th century and spread over the European continent from the early 17th century onwards. As with the museums, one deals here with a complex and diverse concept or institution that, over the centuries, changed and diversified its meaning and missions, its appearance, social status and relevance. The term 'academy' describes institutional or professional organizations as well as less formal groups or societies. It is used for specific locales or buildings, and it crosses the disciplines from the sciences to the arts and fine art in particular. In relation to architecture and architecture exhibitions the interest in the academies is twofold. Firstly, they are of interest in their role as predecessors of the educational institutions of architecture that will crystallize at the beginning of the 19th century. And secondly, and more specific in relation to our topic – architectural exhibitions – the academies play a role in being the locale of permanent as well as temporary exhibitions. The academies are also, in their beginnings, places of developing new knowledge and expressions as well as, in their later stage, places of save-guarding an established orthodoxy. In this respect the academies incorporate both promoting and hindering aspects of the exhibition as a laboratory.

²¹⁸ As within the cases the following *Kunst-* or *Wunderkammer* and the *cabinet des curiosités* the term *studiolo* is used in its original Italian [German and French respectively] version and is not translated into the English term 'study'. This is to underline the geographical and cultural origin of these early places of collecting, studying, exhibiting and experimenting. The translation into the English 'study' (as it is for instance done by Thornton (1997)) with its meaning of 'a room used or designed for reading, writing and academic work' would also favour the scholarly aspects or the artistic aspects of the *studiolo*, it favours 'intellect' over the 'craft', 'perception' over 'production', 'mind' over 'matter'. While this would be appropriate for many of the Renaissance *studioli* it is not universal. Furthermore, it is the latter parts of these binaries that are regarded as important here for the thesis.

Contrary to our modern understanding of the academy as some sort of ivory tower, a safeguard of scholarly and artistic establishment, the Renaissance academies 'provided a humanistic alternative to the often pedantic university world, one open to new people and new ideas' as Ian McNeely puts it²¹⁹. The Renaissance academy would 'offer public lectures, stage plays, produce court festivals, experiment with new music, or sponsor poetry contests'. It was open to 'princes, merchants, professionals, and artisans [that] gathered in them alongside poets and scholars'. Furthermore, 'Academies used vernacular languages like Italian and French' instead Latin which was used at the universities and thus 'burst the confines of the stale, Aristotelian medieval curriculum'²²⁰.

One of the very first of such academies was the *Accademia Platonica* in Florence founded in the mid 1470s under Lorenzo di Medici. There exist slightly conflicting accounts of the very nature of this academy. Jakob Burckhardt, for instance, characterizes the *Accademia* as 'in part [a] political club, though not without a certain poetical and philosophical character'²²¹. McNeely describes its nature as a 'gathering of Renaissance polymaths under the tutelage of enlightened princes; [governed by] an interdisciplinarity embracing music, magic, and philosophy [...]'²²². And Geoffrey Broadbent suggests that it operated like a cloister-type boarding school, which contained already some sort of exhibited collection that was used for studying or teaching purposes. Broadbent further writes that the students, including Leonardo De Vinci who entered in 1475 and Michelangelo who entered in 1480, could study a 'collection of drawings and models by contemporary masters'²²³. In this respect one is confronted here with a very early example of an institution that combined the scholarly or scientific reflection about art with the production of art, both enabled or supported through an exhibition. Neither Burckhardt nor McNeely substantiate with their accounts this very concrete artistic or even architectural aspect of the *Accademia Platonica*.

²¹⁹ MCNEELY, Ian F. (2006). *The Renaissance Academies between Science and the Humanities*, Department of History, University of Oregon, accessed from: University of Oregon Library, <http://hdl.handle.net/1794/2960>. p1
For further reading see: BARZMAN, Karen-Edis, (2000). *The Florentine Academy and the Early Modern State: The Discipline of Disegno*. Cambridge University Press: Cambridge

²²⁰ MCNEELY (2006). p1

²²¹ BURCKHARDT, Jakob (1860) *The Civilization of the Renaissance*. Part III. (English Translation by SGC Middlemore, 1878). p126. Sourced from Project Gutenberg, <http://gutenberg.org/etext/2074> [last accessed: 16.06.2008]

²²² MCNEELY (2006). p5

²²³ BROADBENT, Geoffrey (1995). 'Architectural Education'. in: PEARCE, Martin and TOY, Maggie (eds.), (1995). *Educating Architects*. AD Academy Editions: London. p13

However, what seems to be nevertheless relevant to all accounts is the interdisciplinary and multipurpose character of the *Accademia*, which aimed, in the word of McNeely 'to rekindle a Platonic spirit [and] making all-encompassing knowledge the road to virtue'²²⁴.

In the course of the 16th century almost 400 of such, mostly literary and musical academies should emerge in Italian towns and cities²²⁵. Of a decisively artistic, and implicitly architectural, nature however was the *Accademia delle Arti del Disegno* founded in Florence under Cosimo di Medici in 1563 and first directed by the painter and art historian Giorgio Vasari. The *Accademia del Disegno* could be regarded as the prototype of all later, state-sponsored art academies. It was, as McNeely describes it, 'a hybrid [of] academy, guild, confraternity, studio, and Medici culture ministry'²²⁶. Again, we have here the combination of several disciplines - architecture, sculpture and painting – and the overlay of divers functions, ranging from educational to propositional and representational.

Within this last example one can already identify the conflict of progressive and conservatory aspirations of the academy. On the one hand it was a locale of development and experimentation in the arts, a place where new tendencies were presented and discussed. On the other hand, it also becomes increasingly the guardian over such developments. Consequently and specifically enabled through the position of power that it acquired with its affiliation to the ruling authorities (in the case of the *Accademia del Disegno* it is that of Cosimo di Medici) it controls or even represses all other development within and even outside its own remits. One crucial tool in this respect is the public mediation of its work and the academies, particularly from the 18th century onwards, are here the institutions that determined 'the art style for the societies by exhibitions of the members' work' as Elisabeth Holt writes²²⁷.

The prime example here is the French *Académie (royale) des beaux arts*, and with it the *Académie (royale) d'architecture* and as well as the *École des beaux-arts*, in Paris [See Figure 14]. It is their influence on the development of academies as well as the development of architectural education and architectural exhibitions that makes then of

²²⁴ MCNEELY (2006) p1

²²⁵ Ibid. p8

²²⁶ Ibid. p26

²²⁷ HOLT, Elizabeth Gilmore. (ed.) (1979). *The Triumph of Art for the Public 1785-1848 – The Emerging Role of Exhibitions and Critics*, Princeton University Press: Princeton. p2

specific importance here. Their role for exhibiting architecture happened on three levels. On the first level this is the permanent exhibition of a collection for teaching purposes in a newly developed and specially devised locale. And on a second level it was the venue for annually reoccurring exhibitions of competition entries. And finally it is the exhibition of the students work during the process of its production in the Academy's ateliers.

The *Académie royale d'architecture* was founded in 1671 by Jean-Baptiste Colbert²²⁸. It had originally eight members and was part of the *Académie française*. Instated by the French king, it controlled the architectural profession and was the ultimate jury in all questions regarding new building projects of the French state. By 1717, the *Académie royale d'architecture* also started to educate by opening an architectural school. During the 2-3 yearlong course students had to attend lectures at the academy while working at the same time as apprentices in the ateliers of their teachers²²⁹. The *Académie* further collected and exhibited antique casks, miniature models or architectural artefacts as well as architectural media, drawings and particularly architectural models, from revered contemporary architects. Mosser gives here the examples of Le Vau's and Perrault's models for the competition of the Louvre completion from 1664 that were 'promptly given to the Academy of Architecture where everyone could see them'²³⁰. A large part of the Academy's collection was also made up by the models acquired in 1774 from the estate of Jacques-François Blondel, one of the academies first architectural tutors. Both, the objects of the antiquity collection as well as the 'collection of models' by contemporary architects and academy members had thus an educational purpose or were, as Mosser puts it, architectural 'teaching material'²³¹.

Like all other French royal academies, the *Académie royale d'architecture* was dissolved during the French Revolution in 1793. From 1795 existed an interim institution called the *École spéciale d'architecture*. The academies were reinstated under Napoleon I and in 1816 the *Académie d'architecture* merged with the *Académie de peinture et de sculpture* and the *Académie de musique* to form the *Académie des*

²²⁸ Other royal academies were for instance the *Académie royale de peinture et de sculpture*, founded in 1648 or the *Académie royale de musique*, founded in 1669

²²⁹ Some twenty years later, Jean-François Blondel, who was also teacher at the *Académie*, founded his own architecture school, the *École des arts* in 1740. Here students would attend a fulltime course with educational ateliers, - an educational typology that should also later be introduced in the *École des beaux-arts* and become the norm for all future architecture schools.

²³⁰ MOSSER (1981). p86

²³¹ Ibid.

beaux arts. Yet already in 1806, in what could be regarded as a revival of an institution that existed in another form already under the *ancien régime*, Napoleon had founded the *École des beaux-arts*²³². From 1819 the *École des beaux-arts* taught architecture amongst the other arts and Giedion stresses the fact that this 'maintained [the] unity of architecture with the other arts'²³³. It is in that respect, that one could also see the *Beaux-arts* in a tradition going as far back as the *Accademia del Disegno* in Florence²³⁴.

But besides the multi-disciplinary direction of the school it is its building, that is of interest here. The *École des beaux-arts* comprised a complex of divers buildings built over the course of several centuries. Not all of its buildings are purpose built. In fact, its nucleus is housed in the former convent of the Petits-Augustins that was already built in the 17th century. It is the same building that had been appropriated from 1793 until 1816 by Alexandre Lenoir for the *Musée des monuments français*. When the museum closed in 1816, the building and parts of its collection were given to the *École des Beaux-Arts*. Next to the convent, first François Debret and then Felix Duban built two new, separate and very different buildings devoted to exhibitions. The 'Exhibition Building', with the *Salle Melpomène* and the *Salle Foch*, was reserved solely to the exhibition of the annual and monthly competitions. The *Palais des Études*, completed in 1839, on the other hand, housed the permanent *Beaux-arts*' collections of casts, architectural models, and copies of Greek and Roman art²³⁵. The centrally positioned sculpture court and the adjacent galleries were used as one of the main teaching devises in the school and students would have to study ancient examples as well as

²³² Originally called the *École royale et spéciale des beaux-arts*

²³³ GIEDION, Sigfried (1949). *Space, Time and Architecture – the growth of a new tradition*. Harvard University Press: Cambridge, Mass. p146

²³⁴ It is, however, also at that time that the schism in architecture, which emerges between architecture seen as an art and architecture as driven by technological and engineering developments is formalized through the creation of the *École Polytechnique* in 1794. Giedion, for instance, writes that 'from the beginning of the [nineteenth] century two opposed attitudes, each extreme and each represented by an official institute, face each other in France; the *École des Beaux-Arts* is confronted by the *École Polytechnique*. See: GIEDION (1949). p146 That the *École Polytechnique*, and the architectural education within it, were regarded with an equal esteem than that of the *École des beaux-arts* can be seen in the fact that Jean-Nicolas-Louis Durand was its first and leading tutor of architecture from 1795-1830.

²³⁵ Besides parts of the collection for the *Musée des monuments français* the *École des beaux-arts* inherited also parts of the collections of the Royal Academies, including works painted for admission to the academies, projects submitted for their approval, models collected for teaching purposes, and works which had won the annual Prix de Rome or the various monthly competitions.

Source and further information: Official Website of the *École nationale supérieure des beaux-arts*. http://www.ensba.fr/patrimoine/batiments/palais_etudesEnglish.htm [last accessed: 16.08.2008]

more contemporary predecessors and apply them to their contemporary designs²³⁶.

It is remarkable here that the two main new buildings (and to a certain degree also the old convent) of this new educational institution are used for exhibition purpose. The particular building typology, which was first developed here at the *École des beaux-arts* and that put this specific educational model of learning from exhibited material into a concrete material form should become the model for most art academies in the following decades. However, the combination of an educational institution with a museum can be almost regarded as an outmoded model right from the point of its conception. Despite the fact that the *Beaux-arts* is particular occurrence of the second half of the 18th and the first half of the 19th century 'such hybrid institutions'²³⁷, as Fliedl calls them, are somehow at odds with the specialized institutions – both educational and museological - that emerge in the course of the 19th century.

But it is this 'hybrid nature' that is of interest for us here and the laboratory exhibition. One would probably not attest the exhibited collection of antique casts, miniature models or former competition entries an experimental character and call this kind of exhibition in itself a laboratory. It contains nevertheless a projective and productive aspect that relates it to the laboratory exhibition. The museum, or, in the case of *Beaux-arts*, the *Salle des études* and the *Galerie grèque* and *Galerie romaine* were still the active place of the production and reception of art. Students and their tutors used the museum spaces to actually work within them. It is in the active perception and consequently in the transformation of the exhibits into new work by the students that we can find aspects of the laboratory in this type of exhibition.

The *studiolo* – superposition of hidden storage and production

The Renaissance *studiolo* can be regarded as the first dedicated space of Modernity in which objects are kept not only because they have a spiritual or monetary value but also to be studied and displayed²³⁸. It is here that collected objects are ordered, stored and (temporarily) displayed according to set of intellectual criteria. However, the

²³⁶ The collection also contained almost 40,000 architectural drawings, amongst them 15th-18th century architectural and ornamental drawings as well as drawings by the 19th century architects that originated from their Grand Tours study trips.

²³⁷ Source: <http://homepage.univie.ac.at/gottfried.fliedl/glossarmuseologie/m.html> [last accessed: 18.06.2008]

²³⁸ Prior to the collections kept in the *studioli* one would have to mention here treasure chests, the collections of religious relicts, as well as the libraries and so called *museion* of Antiquity that contained collections of scripture.

studiolo is not yet a publicly accessible display place. It is also ambiguous in its function. The Renaissance *studiolo* is in essence a private space containing collections and "hidden" displays. It was, according to Campbell, a 'space devoted [...] to private reading and contemplation'²³⁹.

One should stress here that the term is often used for two slightly different forms or concepts of the *studiolo*. These different forms are related to the actual users or owners of the *studioli*. On the one hand, one can find those that are established by scholars and mainly used to study and experiment. Here the *studiolo* often takes on the character of a proper laboratory or workshop, they are production places as much as places to study. In effect they were places of study through experimental work. One can assume that these *studioli* were, due to a lack of financial means and without the necessity of representation, less elaborate in their actual interiors and less directed towards the presentation of the collected objects and the experiments that were conducted within them. On the other hand one can find *studioli* that were owned by Renaissance princes and princesses that had strong humanist interest and aspirations²⁴⁰. The *studioli* are here places of study but they were also, as Giuseppe Olmi argues 'an attempt to re-appropriate and reassemble all reality in miniature, to constitute a place from the centre of which the prince could symbolically reclaim dominion over the entire natural and artificial world'²⁴¹. In that respect they were not only a place of knowledge but also a place of symbolical power²⁴².

The private nature of the princely *studiolo* is also expressed through its spatial position within the palace. It could either be found adjacent to the bedchamber in the most private parts of the palazzo - as in the *Palazzo Ducale* in Urbino²⁴³ - or it was placed at

²³⁹ CAMPBELL, Stephen J. (2006) *The Cabinet of Eros - Renaissance Mythological Painting and the Studiolo of Isabella D'Este*. Yale University Press: Yale. Book Synopsis on back-cover

²⁴⁰ Isabella d'Este for instance had one of the most celebrated *studioli* of the time

²⁴¹ OLM, Giuseppe (1985) 'Science-honour-metaphor: Italian cabinets of the sixteenth and seventeenth centuries', in: IMPEY, Olive and MACGREGOR, Arthur (eds.) (1985). *The Origins of Museums: The Cabinet of Curiosities in the Sixteenth and Seventeenth Century Europe*, Clarendon Press: Oxford. p5

²⁴² For further reading see: THORNTON, Dora (1997). *The Scholar In His Study – Ownership and Experience in Renaissance Italy*. Yale University Press: New Haven & London. Here in particular chapter 5 'The Collector's Study' pp99-125.

²⁴³ According to Scholler, one can regard the *studiolo* of Federico da Montefeltro in the *Palazzo Ducale* of Urbino as the prototype for all later *studioli*. See: SCHOLLER, Dietrich (1997). "'Mais on ne voit chez vous que des choses lugubres!' - Enzyklopädische Sichtbarkeit in Flauberts *Bouvard et Pécuchet*". In: *Philologie im Netz*. 1/97. p44. Sourced from www.phin.de [Last accessed: 16.06.2008]

the very end of a succession of rooms - as in the *Palazzo Ducale* in Gubbio. Reclusiveness in the establishment of a *studiolo* is a '*prima ratio*' for the Renaissance prince. It is in particular the centrality, or the 'central point of inspection' as Bennett calls it²⁴⁴, which is distinctive to the *studiolo*. It is a centrality that happened on three levels: first in terms of the *studiolo*'s position within its containing building; secondly through the position of a central point of inspection, a table reserved for the prince (who often was the sole viewer of the collection), and which was surrounded by the cabinets holding the collection; and thirdly through the imaginary central viewpoint of the *studiolo* from which the outside world is examined by the collector.

Another aspect that is peculiar to the *studiolo* and that is emphasized by Bennett is the fact 'that the doors of the cupboards containing the [collection's] objects were closed'²⁴⁵. This seems to contradict our contemporary notion of the exhibition in which objects are openly displayed for inspection. In the *studiolo* however, this inspection happened only temporarily when objects were taken out of their respective cupboards or cabinets and were positioned on the examination table. In that respect a 'temporary exhibition' was constantly rearranged and objects were presented and examined in varying contexts. A new context was produced through the selection of objects at any one moment. The contextual arrangement of objects in combination with the agenda under which they were studied thus altered the perception of each individual object. Consequently it completed the production of the objects by creating its new context and meaning²⁴⁶.

There is a further aspect regarding the closed cupboard-doors that is of relevance here. The doors were usually displaying an iconography relating to the objects contained in the respective cupboards. They were the carrier of either paintings or intarsia. Famous examples with such intarsia would be the *studiolo* in the *Palazzo Ducale* in Urbino [See Figure 15] or Federigo da Montefeltro's *studiolo* in the *Palazzo Ducale* of Gubbio²⁴⁷. As such, these iconographic cabinet doors are already exhibitions in their own right. The nature of these exhibitions is twofold. Firstly they are

²⁴⁴ BENNETT (1995). pp35/36

²⁴⁵ Ibid. p36

²⁴⁶ The nature of the 'hidden' within the *studiolo* changes at the end of the sixteenth century when more and more *studioli* are opened to selected visitors and specifically designed display furniture becomes essential part of the *studiolo*.

²⁴⁷ Now exhibited at the Metropolitan Museum of Art in New York. For a visual tour through the *studiolo* visit: <http://www.metmuseum.org/explore/studiolo/studiolo.html> [Last accessed: 16.06.2008]

presentations of a specific artistic quality. The wooden intarsia, for instance, would play with three-dimensional *trompe l'oeil* effects utilising the recently discovered laws of perspective. Secondly the *studiolo* walls displayed an ideological programme that would symbolically proclaim power of its owner over the known natural and artificial world.

One has to stress here that the early collections of the *studioli* were only indirectly concerned with architecture. On the one hand scholars and artists would conduct experiments in perspective and geometry that had a relation with architecture. (One could also assume that the collection of books within them included some of the newly emerging architectural treatises) On the other hand, as has been already mentioned above, the furnishing of the *studiolo* could be regarded as an architectural display in its own right²⁴⁸. We have, however, established several characteristics of the *studiolo* that are of relevance to the architectural exhibition as a laboratory. First and foremost it is the super-positioning and simultaneity of storing and exhibiting, of studying, experimenting and creating within one space. It is further the contained size and interdependence between displayed and displaying objects that makes the *studiolo* comparable to modern or contemporary laboratory exhibitions. And finally it is the fact that the *studiolo* only 'comes to live' through the active engagement of the acting subject within it. Without this subject, the exhibition remains hidden and no experimental exploration can take place.

The architect's studio – process made visible

As has been shown above, the studio, or the space of architectural and artistic production, overlaps partly with other spaces of production, reflection and display. This is firstly the Renaissance *studiolo* with which it shares the same etymological root, both deriving from the Latin term *studium*. The ambiguity between being a place for scholarly study and artist experimentation and production, still existent in the Renaissance *studiolo*, gets lost, in the English language, at the beginning of the 19th century through the emerging distinction between the 'study' and the 'studio'. In line with many other typological and functional refinements or redefinitions of formerly ambiguous and multilayered spaces into mono-functional buildings or specific spatial typologies that occur during the 18th and 19th century the studio is now regarded a distinct place of artistic production²⁴⁹. However, we will see that this semantically

²⁴⁸ See: THORNTON (1997). See here in particular: Chapter 5, pp99-125

²⁴⁹ See here in particular: PEVSNER, Nikolaus (1976). *A History of Building Types*. Thames&Hudson: London

supported distinction, between intellect and art, scholar and artist, collector and producer, mind and matter is a binary that is historically questionable. It is furthermore a concept that should be challenged by artists and architects of the 20th century avant-garde in the production and exhibition praxis.

The term 'atelier', which, since the 18th century signifies the same space as the studio has also undergone such a transformation and the thesis uses in the following paragraphs the term studio synonymously with the 'atelier'²⁵⁰. It is however interesting to note here that the term atelier, which is predominantly used in the French cultural sphere, derives from the Old French word *astelle*, meaning 'splinter of wood'. The atelier was first synonymous with an artisanal wood workshop before being gradually lifted into the realm of the fine arts or architecture²⁵¹. In that respect it had right from its origin an association with manual creation and production while the term 'studio' had to undergo a shift from the studious to the (manually) productive.

The studio of the architect and artist as an exhibition space concerns us here on several levels. Studios are both places of collection and as well as active spaces of production. The combination of collecting and artistic production is probably as old as a reflected production of art and architecture itself. The studio's aspect as a space of collection has been described by James Putnam who asserts that 'artists are by nature collectors of both forms and images'²⁵². They are 'inevitably collectors of their own works in finished or preparatory form, which they might periodically reappraise and modify'²⁵³. In this respect the studio acts also as 'a storage place where both ideas and materials are evaluated'²⁵⁴ and 'their studios might even need to be organized in a way similar to museum storerooms'²⁵⁵. This is as true for visual artists as it is for architects. Sketches of projects in the making are pinned at the walls, drawings kept in drawers,

MARKUS (1993)

²⁵⁰ Only in specific cases like the *École des beaux-arts* and their *ateliers* the thesis will use the term in its original French version.

²⁵¹ One can refer here also back to Burckhardt who already mentions the close relation of many 15th and 16th century architects with the woodcraft work – a relation that should indeed be intact right into the 18th century. See also PART I. Chapter 3, Section 'The architectural model'.

²⁵² PUTNAM (2001). p66

²⁵³ Ibid. p19

²⁵⁴ Ibid. p66

²⁵⁵ Ibid. p19

working and presentation models are displayed or just randomly placed on shelves and tables.

But the collected material in the studio is not only limited to an artist's or architect's own works. It comprises as well collected material that is used as inspiration or serves as model and reference [See Figure 16]. Legge supports this argument when she writes that artists have 'always and in all times collected. The *studioli*, scholarly museums and ateliers of the Renaissance artists were early examples of an artistic collection activity. They served both as source of inspiration and as "depot" in which the artists collected their blueprints that could be retrieved whenever they were needed'²⁵⁶ [author's translation]. In most cases this other material is then deliberately or accidentally displayed together with the artist's/architect's own material and can form a coherent yet momentary presentation of the architect's artistic and intellectual production and reflection. In that respect they have an affinity with the carefully designed environments of the *cabinets des curiosités*²⁵⁷.

Similar to these *cabinets des curiosités* and their predecessor, the *Kunstkammer*, the artist's and architect's studio was also a place of social and professional engagement. Its role as social space can already be witnessed in the 17th century, yet it should come to its fullest extent in the 18th and 19th century. The opening of the studio can partly be explained through a change of dependencies that happens at the end of the 16th century. The artists, and to a lesser extend also the architects, are no longer solely bound to one patron but have to present and promote themselves publicly in order to get new commissions or to actually sell their work. But with the growing social role and status that artist and architects gain in the 16th and 17th century, their work as well as the artists become the veritable objective of the emerging praxis of 'cultural' travelling. This praxis finds its foremost expression in the already mentioned Grand Tour with Rome in the very centre of it. As for instance Holt writes: 'Rome teemed up with connoisseurs from all Europe; these collectors, amateurs, *dilettanti* and artists sponsored numerous private exhibitions throughout the city'²⁵⁸. She continues by noticing that 'by the seventeenth century renowned artists and sculptors in Rome had adopted the practice of displaying their work in their own large studios'²⁵⁹.

²⁵⁶ LEGGE (2000). p11

²⁵⁷ Walter Grasskamp likens the artist's studio to 'small curiosity cabinets'. GRASSKAMP, Walter (1979). 'Künstler und andere Sammler'. In: *Kunstforum* 2/79. p34. quoted in Legge (2000) p11

²⁵⁸ HOLT (1979). p4

²⁵⁹ Ibid.

The following paragraphs deal with one extraordinary and emblematic example of such exhibitions. It is a, possibly only imagined, exhibition of *veduti* depicting Roman architecture that is presented to us in two paintings by Giovanni Paolo Pannini (1692-1765). In *Roma Antica* [See Figure 17] and its pendant *Roma Moderna*, painted between 1754 and 1759, we see two very similar yet distinguishable spaces of enormous dimensions that seem to extend almost endlessly into the distance²⁶⁰. They are hung from bottom to ceiling with around sixty painted *veduti* of Roman ruins and contemporary or even only projected buildings respectively. The individual paintings within these two paintings are indeed creations of Pannini himself. Additionally, to the paintings, that seem all to be directed towards a viewer outside the depicted scene, we see several sculptures and architectural artefacts as well as drawing folios placed 'randomly' in the foreground. The scene is populated with several smaller groups of people studying the objects around them. They somehow mirror the groups populating the paintings that they study. Natural light flows from hidden sources into the spaces that dissolve in the far distance into an undefined nature.

It is not entirely clear if we are looking at a place of production or one that is solely used for presentation. Although the space seems – even for a painter of Pannini's reputation – too vast, paintings of other artists' studios from the same period suggest that ateliers were used in a similar way for exhibition purposes²⁶¹. However, the way in which the paintings are hung side by side, from bottom to ceiling is identical to hangings that could be found in art galleries, or indeed in the Paris *Salons*, during the 18th century²⁶². But the combination of collected artefacts, copies or originals of antique and contemporary sculptures, drawing folios etc with Pannini's work suggests that we see the referential and inspirational material as it would have been present in an artist's studio at the time. One could also speculate that Pannini painted the drawn curtains in the foreground as a reference to one of the most famous paintings showing a painter in his studio – namely Vermeer's *The Artist in his Studio* from 1665.

²⁶⁰ The paintings were originally commissioned by the French ambassador to the Vatican, the Duc de Choiseul who can be seen standing in the centre of these paintings with Pannini behind him. However, Pannini reproduced the paintings and today exist still several versions of both *Roma Antica* and *Roma Moderna*, each with the respective client replacing Choiseul. Paintings are at the Louvre, Staatsgalerie Stuttgart; Boston; National Gallery Scotland

²⁶¹ Compare for instance with Pierre Subleyras' painting *The Studio of the Painter* from 1747-49, at the *Akademie der Bildenden Künste*, Vienna. We see into the studio space that is filled with paintings from bottom to ceiling, several unfinished works leaning against the wall, the painter himself, with the back to us, painting on one of them and a visitor holding another painting towards us.

²⁶² See for instance: Etching *Exposition au Salon du Louvre En 1787* by Piero Antonio Martini

Although Pannini became predominantly famous for his paintings, *veduti* and *capricci* of ancient Roman architecture as they are depicted in *Roma Antica* and *Roma Moderna*, he also worked as an architect, stage designer, draftsman and teacher²⁶³. We do not see any actual architectural work by Pannini depicted 'in' the painting but Pannini nevertheless demonstrates his architectural abilities in the creation of these two phantastical spaces²⁶⁴. And although the exhibition of paintings shown in the two paintings as well as the paintings themselves are meant to present us with Pannini's artistic productiveness and virtuosity their topic is first and foremost architecture. One can thus identify several aspects within these paintings that are of principal relevance towards the creation of architectural exhibitions and their relation to the studio in particular. Firstly, their importance as being the earliest pictorial representations of an exhibition dedicated exclusively to architecture within one dedicated exhibition space to a wider public²⁶⁵. As such they mediate and popularize the relatively new concept of architectural exhibitions. Secondly, the collection and reassembly of both antique and contemporary architectures into two dedicated spaces, represented in two respective paintings creates an entirely new, selected, overview of Rome. Both paintings give thus a "curated image" of Roman architecture in a comprehensice totality that would never exist outside the gallery space. Pannini acts here as producer of a new perception and understanding of Rome's architecture. In effect he re-creates Rome's architecture. And thirdly, it is the presentation of this specific studio exhibition space itself. The paintings show a new spatial and functional typology that, although referring to the palatial linear gallery, goes decisively beyond it. It is a space that is no longer a purely a ceremonial space nor a space exclusively used for artistic production. It is a spatial and functional hybrid that should become one of the models used in presenting art and architecture in a 'working environment'.

We have so far dealt with the studio of individual architects or artists. Yet, one has to bear in mind that these producers worked within these studios not in solitude but

²⁶³ Pannini taught also at the *Académie de France* in Rome where he should influence many French artists who stayed there after winning the *Prix de Rome*.

²⁶⁴ One has to refer here also to a painting that has been painted several years before the two 'Roma' paintings. The *Galleria del Cardinale Silvio Valenti Gonzaga* from 1740/9 depicts a gallery space similar to the two other spaces. Pannini had used here almost the same perspective and the same arrangements of two intersecting gallery spaces, with the central one 'disappearing' in an undefined distance. Yet instead of architecture, the paintings on the wall show almost exclusively human portraits.

²⁶⁵ Although the primary recipient of the painting is Pannini's patron, first the Duc de Choiseul and later several other clients, who acquired them as a 'souvenir' or memory of his stay in Rome, the paintings found a much larger audience once they were exhibited in the patron's collection.

usually with a supporting team of assistants and apprentices. In that respect the studio, at least those of the more successful architects and artists, were and are also spaces of collective production. The design studio of the academies and schools of architecture forms one particular type of such collective studios. They can here only be dealt with in passing. Their educational and hence experimental character and the continuous presentation of emerging new work to peers and educators, however, gives them a particular significance in regard of the studio as laboratory.

From the moment of the establishment of the first architectural schools one also had to establish forms of presenting architectural work in this educational process. The first school to combine the design studio and the, private, architecture school was the *École des arts*, established by Jean-François Blondel in 1740. According to Peter Collins, architecture students went here into a full-time, institutional education in which the *atelier* formed the central focal point²⁶⁶. The *Académie royale d'architecture*, predecessor of the *École des beaux-arts*, on the other hand, had originally no studios within the school. Students would attend lectures in the academy but got their professional training in the *ateliers* of the academy members. The *ateliers* were each headed by one of the Beaux Arts teachers - the *patron* - and run almost autonomously by the students themselves²⁶⁷.

According to Yee, the size of the *ateliers* could vary between 30 and 80 students²⁶⁸. The *ateliers*, located usually within the vicinity of the *École des beaux-arts*, were 'open spaces with drafting tables and places to pin up drawings'²⁶⁹. Richard Chafee describes the character of these *ateliers* and their informal way of presenting and discussing students work: 'The *anciens* (...) gave the benefit of their experience to the *nouveaux* by criticizing designs, not in formal sessions but in the endless exchange of ideas about architecture that was the intellectual life of the *atelier*'²⁷⁰ [See Figure 18]. We thus have

²⁶⁶ COLLINS, Peter. (1979). 'The 18th Century Origins of our System of Full-time Architectural Schooling.' In: *Journal of Architectural Education* 33:2. pp2-6

²⁶⁷ For further reading on the Beaux Arts atelier see:
EGBERT, Donald Drew (1980). *The Beaux-Arts tradition in French architecture*. Princeton University Press: Princeton, N.J.
YEE, Susan (2001). *Building Communities for Design Education*. PhD Thesis at the MIT, Feb. 2001. Here in particular Chapter 2.1 *Origins of the Design Studio*, pp37-49, in which Yee explores the specifically educational system through design studios or ateliers at the *École des beaux-arts* in Paris and its later influence in the American Beaux-Arts tradition.

²⁶⁸ YEE (2001). p44

²⁶⁹ Ibid. p46

here a locale that combines, in a rather informal yet quasi-institutionalized manner, production and experimentation with presentation and reflection of architecture. And although this happens as an almost exclusively professional discourse, lacking any other public, one can relate the educational atelier or studio with the laboratory function of exhibiting architecture.

It has been established that the studio as a place of collection and production is inevitably also place of continuous presentation. In the most concentrated sense, the work is present by and to the producers themselves. The producer, the architect or artist, is at same time exhibitor and recipient of the work. Work is placed in front of them or stored around them. This dialectic is necessary in order to be able to reflect upon the work, to test it and to refine it. As this work, both as process and as individual objects, is in constant progression their exhibition can never be static or permanent but is rather one of change and continuation. As a place in which both own work as well as referential and inspirational objects are collected the studio forms an continuously changing environment that presents, at the same time, a reminiscence of the past, a reflection on the presence and as well as propositions for the future. It is the studio's exhibitory function and its quality as a space of continual artistic experimentation and multifaceted perception that makes it relevant for this thesis.

The studio of the architect or artist is thus automatically a laboratory in which new ideas, methods and spatial propositions are tested. When the studio then becomes also a publicly accessible space in which architects exhibit their work, then one could say that the laboratory aspect of the studio also becomes part of the exhibition (unless it is deliberately hidden to not give an insight in the working method of the architect's practice). The 'exhibited laboratory' is yet not the same as the 'exhibition as a laboratory' but there are obvious intersections and correlations that are of interest here. It is here in particular of concern how the studio is used as an exhibition space (or the studio can become an exhibition in its own right) and how, vice versa, exhibitions have used and are using the 'studio' as a curatorial concept²⁷¹ [See Figure 19]. It is a concept that deliberately incorporates process, incompleteness and proposition. It thus allows for a speculation, experimenting, testing and questioning – all preconditions for the laboratory exhibition²⁷².

²⁷⁰ CHAFEE, Richard (1977). 'The Teaching of Architecture at the École des Beaux-Arts' in: DREXLER, A., (ed.) (1977). *The Architecture of the École des Beaux-Arts*. MIT Press: Cambridge, MA. p92

²⁷¹ For further reading see also: LEGGE (2000).

²⁷² See definition 'laboratory exhibition', Chapter 1 – Introduction

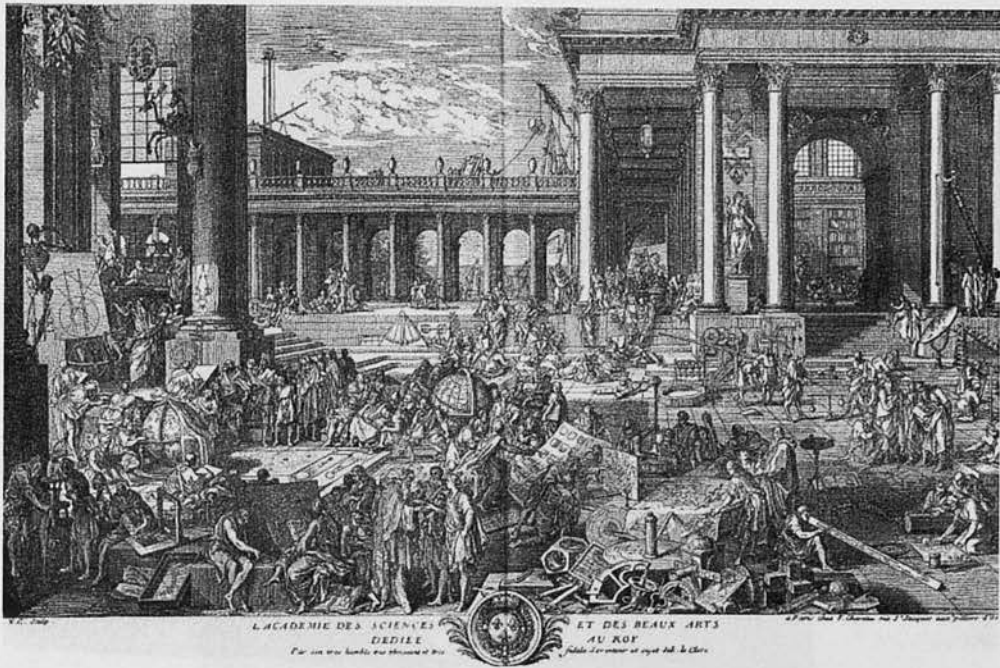


Figure 14: Sebastien Le Clerc, L'academie des sciences et des beaux arts dediee au roi, 1698.



Figure 15: Studiolo in the Palazzo Ducale, Urbino. The intarsia of the closed cabinets produces on the one hand a trompe l'oeil and on the other hand indicates the content of the collection.

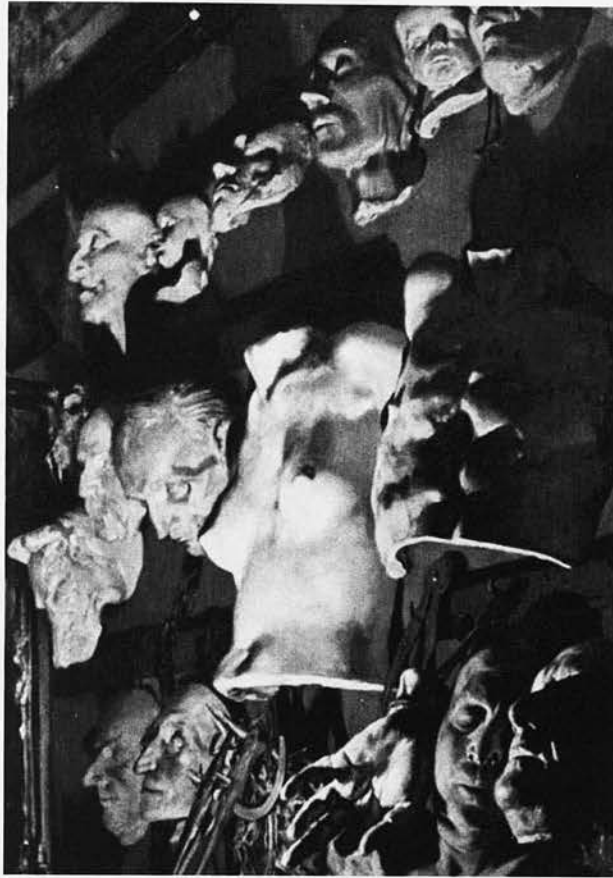


Figure 16: Adolf Friedrich Erdmann Menzel, *Atelierwand*, 1872.



Figure 17: Giovanni Paolo Pannini, *Roma Antica*, 1754/1757, Staatsgalerie Stuttgart.

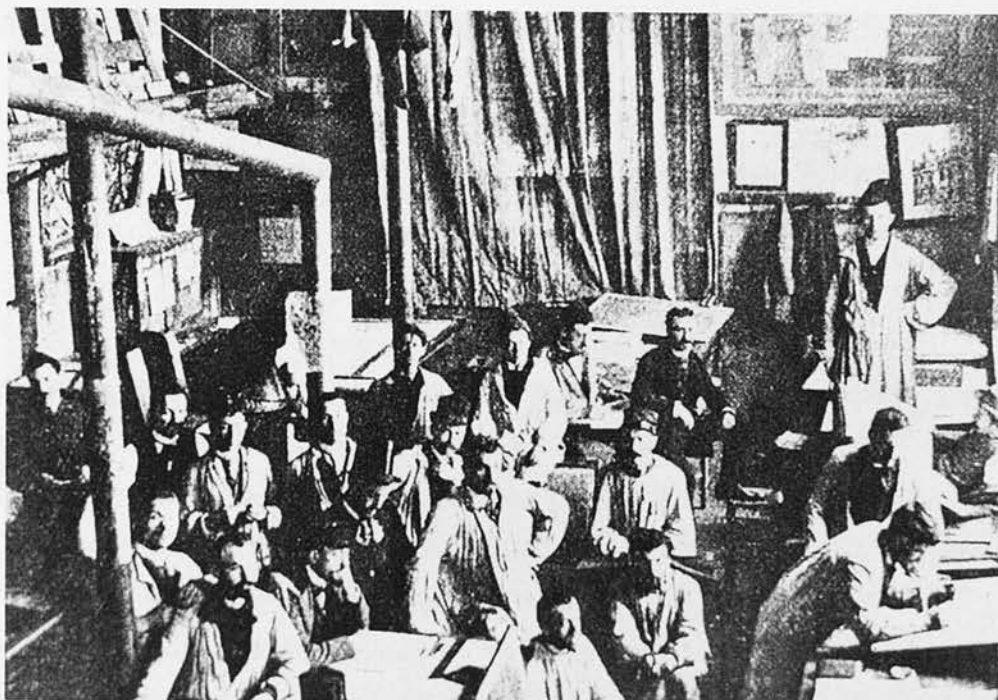


Figure 18: Architecture students in an atelier of the École des Beaux Arts Paris, c.1900



Figure 19: Unser Berlin - Our Berlin by G.L.A.S. at the Aedes East Pavilion, Berlin, 2003. The gallery is transformed into a publicly accessible workplace, the visible production process is part of the exhibition.

CHAPTER 6 – Curating the Architectural Laboratory

The architecture exhibition always has to be a project in its own right. And within this exhibition project something new has to emerge. It is about the concerted experimenting and testing of architecture through the architect, the curator and the visitor together.

Kristin Feireiss in an interview with the author, 01.12.2005

The following chapter deals with four exhibition locales in which the experimental notion of the exhibition is produced not so much through the primary production of architectural media and propositions but through the curation of such material. These four locale examined here are the *Kunst-* or *Wunderkammer*; the *Cabinet de Curiosités*; the first Architectural Museums; and finally Architecture Biennials²⁷³. These are all locale where the acting subject or primary producer of the laboratory is not necessarily an architect, although, as we will see, this is the case in some architecture museums and the architecture biennale, but where this role is taken by a curator, that could, for instance, be an amateur or professional collector. Within this type of exhibitions and exhibition places there is an increasing shift from the more or less private exhibition with a very limited audience to the fully public event that verges towards the mass spectacle.

The *Wunder-* or *Kunst*kammer – constructing a micro-cosmos

During the late 15th century the *studiolo* was gradually transformed from its original function as a reclusive place of study to a semi-public, gregarious space. It became 'a space of luxury, [that was] as much devoted to displaying the taste and culture of its occupant as to studious withdrawal'²⁷⁴. This transformation from the hidden collection to the displayed collection, from solitary study to social exchange should finally lead to the so-called *Kunst-* and *Wunderkammer* of the 16th century. It is here that for the first time in modern architectural history a building typology is conceived and built whose sole purpose it is to house a collection. Similarly, the term 'museum' that had been partly used for the *studiolo* and would now also signify some *Kunst-* or *Wunderkammer*, underwent a change as the concept of the 'museum' extended

²⁷³ Within this section one could have also included the *studiolo*. However, the *studiolo* has already been dealt with in the previous section to emphasise its nature of a place of studious work and experimental production. Within the above exploration it has become also apparent that the *studiolo* is also a place of (private) collection and consequently curation that would have allowed to include it in the following section.

²⁷⁴ CAMPBELL (2006). book abstract

towards the active mediation of its collection²⁷⁵. Astrid Legge supports this argument when she writes of the 'shift in the meaning [that appears in the middle of the 15th century] of the term [museum] that is now partly used for the just emerging princely *Kunstkammer*. The study functions moves to the background and the display function comes to the fore'²⁷⁶. [author's translation]

Regarding the programme of the *Kunst-* and *Wunderkammer* there existed still a great congruence with the former *studiolo*. As the *studiolo*, the *Kunst-* and *Wunderkammer* is 'based on the idea that the entire cosmos could be controlled within the confines of a private room'²⁷⁷ as André Putnam writes. Or as Hooper-Greenhill puts it, these collections had the purpose 'to recreate the world in miniature around the central figure of the prince who thus claimed dominion over the world symbolically as he did in reality'²⁷⁸. However, in contrast to the humanist and purely scholarly character of the *studiolo*, the *Kunst-* and *Wunderkammer* was also a place where 'rare, precious and bizarre objects were intended to provide aesthetic pleasure'²⁷⁹. In order to do this, they had to transform the collection's concept of the hidden object into one that was based on the most effective display of objects [See Figure 20]. And while the *Kunst-* and *Wunderkammer* were still private places, both in terms of actual ownership and in terms of the very subjective personal 'environments' they displayed, they created a new relation between the collector, the collected and the invited visitor.

According to Pomian, the *Kunst-* and *Wunderkammer* constructed 'a universe [...] where every question could legitimately be posed. [...] it was a universe to which corresponded a curiosity no longer controlled by theology and not yet controlled by

²⁷⁵ *Museum Wormianum* in Copenhagen, housing the collection of Ole or Olous Worm (1588-1654); *Museum Kirchnerianum* in Rome, named after its first curator, the Jesuit priest Athanasius Kirchner (1602-1680) displaying anything from Egyptian obelisks to animal skeletons; *Neickels Museum* in Hamburg, showing the collection of Casper Friedrich Neickel (~1727); Museum of Manfredo Settala (1600-1680) in Milan with combination of display rooms and adjacent spaces for workshops (or *laboratorio* in Italian) to name just a few. Note that these 'museums' are still very private places that would only be seen by the collector and invited visitors.

²⁷⁶ LEGGE (2000). p8. [So zeichnete sich von der Mitte des 15. Jahrhunderts an eine erneute Bedeutungsverschiebung ab, als der Begriff teilweise auf die in dieser Zeit entstehenden fürstlichen Kunstkammern übertragen wurde.⁸ Sie unterschieden sich von den "studioli" nicht nur in der Größe, sondern auch in Funktion und Bestand. Die Studienfunktion trat in den Hintergrund, die Schaufunktion in den Vordergrund]

²⁷⁷ PUTNAM (2001). p10

²⁷⁸ HOOPER-GREENHILL, Eilean (1989). 'The Museum in the Disciplinary Society' in: PEARCE, J. (ed.), (1989). *Museum Studies in Material Culture*, Leicester University Press: Leister. p64

²⁷⁹ *Ibid.*

science, [...]. Given free reign during its brief interregnum, curiosity spontaneously fixed on all that was most rare and most inaccessible, most astonishing and most enigmatic'²⁸⁰. Dietrich Scholler argues that these new collections can be seen as a '*Teatri del Mondo*'²⁸¹, a 'world theatre', presided over by the Prince as a 'Promethean Director' who 'would re-stage the harmonic creation/genesis [...]'²⁸².

In that respect the collection followed less an intellectual classification than it is conceived with a 'dramaturgical' intention. Horst Bredekamp underlines this argument when he explains that one of the reasons for the only weakly pronounced classification of objects within the *Kunstkammer* can be explained by the role of these early collection and presentation spaces as 'spaces of play' or 'stage sets'²⁸³. This implies that, in contrast to the scholarly *studiolo*, the collectors of the *Kunstkammer* also wanted to entertain their public. As such, the *Kunstkammer* and its collection formed a crucial part in the 16th century in the emerging courtly culture that should become characterized by an ever more refined protocol of social visits and exchange²⁸⁴. The emergence of a growing public is here indeed one of the crucial steps toward exhibitions, as we know them today.

Yet, one can establish also a slightly different aspect of the *Wunderkammer* and its collections. Scholler, for instance, calls these early collections 'visual encyclopaedias'²⁸⁵. He argues that their 'encyclopaedic dimension consists of a reduction of the macro-cosmos to a kind of micro-cosmos'²⁸⁶. Like encyclopaedic books they are 'characterized by the idea of totality'²⁸⁷ as Pomian puts it. Their 'encyclopaedic'

²⁸⁰ POMIAN (1990) pp77-78. Cited in BENNETT (1995). p40

²⁸¹ Scholler quotes here OLM (1990). p253

²⁸² SCHOLLER (1997). p46

²⁸³ BREDEKAMP, Horst (1993). *Antikensehnsucht und Maschinenglauben – Die Geschichte der Kunstkammer und die Zukunft der Kunstgeschichte*. Wagenbach: Berlin.
Bredekamp uses the German term *Spielräume* that could either be translated as 'spaces of play' or 'stage sets'

²⁸⁴ With increasing mobility and the urge to explore foreign cultures, countries and cities during the 17th century the collections of the *Kunst* and *Wunderkammer* of Europe's principalities would become attractions in their own right and were visited by many travellers. It became particularly an important part on the so-called Grand Tours undertaken by young European noble men and artists. Like pilgrims who would travel to the numerous sites of alleged miracles, they would visit on their Grand Tour the *Wunder-* and *Kunstkammern* of Europe. See also SCHOLLER (1997). p47

²⁸⁵ SCHOLLER (1997). p43

²⁸⁶ Ibid.

²⁸⁷ POMIAN (1990). p16

character is based on their aim to create a unity of completeness, classification and sensuous perception - a concept that would finally lead towards the modern idea of the museum²⁸⁸. Collections, like the princely *Kunstkammer*, achieve this by condensing and representing the complex macrocosmos into a visible and comprehensible micro-cosmos²⁸⁹.

As in the case of the *studiolo*, it is this aspect of the condensed and hence comprehensible micro-cosmos or the '*Welt in der Stube*', as Astrid Legge calls it²⁹⁰, which is of interest here regarding the laboratory exhibition. The construction, presentation, and consequently the public scrutinization of a micro-cosmos 'designed' through the arrangement of collected objects fulfils some of the requirements of the Laboratory definition given in the introduction of this thesis. The relation to architecture is here of course only indirect. Yet their affinity with 'staged sets' and the creation of theatrical effect by means of architectural interventions makes them relevant here. Additionally, the introduction of a new functional building typology, intended for the open exhibition of collected artefacts and the concept of an audience which populates these new spaces is of paramount importance for all future exhibition spaces and exhibitions types, including the Laboratory Exhibition.

The *cabinet des curiosités* – creating a public locale

We have established that the *Kunst* – and *Wunderkammer* of the 16th and 17th century gave the collectors the opportunity to create and present their own interpretation of the macro-cosmos in a choreographed micro-cosmos. Its creation had a quasi-religious connotation. In the *cabinet de curiosités* that would emerge in the 18th century this connotation had partly vanished. The focus now was not on the recreation of the macro-cosmos but on the materialization of an aesthetic idea in the presence of a perceiving public. The *cabinet de curiosités* is characterized on the one hand through the multilayered form of display – from the architectural container or building, to the interior decoration, the display furniture and finally to the presented objects [See Figure 21]. On the other hand it is characterized through the new social

²⁸⁸ see: SCHOLLER (1997). p44

²⁸⁹ Scholler further argues that there is a paradox in the fact that the history of the 'visible encyclopaedia' comes to an end in the very moment when the 'museum of terms' reaches its highpoint through the publication of Diderot's *Encyclopaedia*. The concept of 'totality' that was asserted by the *Kunstkammer* and the naturalia cabinets was abandoned in favour of, as Olmi puts it, a 'methodological, ordered 'completeness' that formed a concatenate sequence, organized as a series'. See OLMI (1992). p201 "completezza ordinata con metodo, formata di sequenze concatenate, organizzata per serie" [author's translation]

²⁹⁰ LEGGE (2000). p7

practice that took place in these spaces, namely the creation of an individual and common (increasingly bourgeois) self-consciousness through the act of engaging with a cultural institution. Dietz and Nutz support the social importance of these new exhibition places when they write that in Paris alone existed 'a network of more than 450 private collections of this sort'²⁹¹. They were predominantly created and frequented by members of the aristocracy and as well as a growing number of wealthy financiers, merchants and clergy. These groups were engaged in a social practice that followed specific rules or 'rituals' as Katie Scott puts it. These rituals 'consisted in part of an exchange of recognition and respect. Individuals visited each other in order to be present at the splendid rituals through which status was partly expressed'²⁹².

But the group of visitors of the *cabinet des curiosités* would go beyond the noble and wealthy society of the particular city in which the collection was shown. As we have previously seen in the case of the *Kunstammer*, the *cabinet de curiosités* were even more distinctive targets of and motives for travelling in the 18th century, as it is documented through contemporary travel guides or travel accounts. Dietz writes here that 'travel guides often mention the collections in a town first among the sights to be seen. They provide information about opening hours, applying to visit a collection, and sometimes also about the personality of the owner, a factor that was vitally important in the age of private collections'²⁹³. However, the public aspect of the *cabinet de curiosités* is still one of a distinct exclusivity. On the one hand only those belonging to a specific social class would have gained access to these collections in private houses. On the other hand the collections were 'intelligible only to those with the time, inclination and cultural training to be able to decipher the relationship in which each object stood to the whole'²⁹⁴.

Of particular interest in regard of the laboratory exhibition are here also the few examples of *cabinets des curiosités* by artists. The cabinets of the aristocracy had been 'a distinctive prestige-generating practice' in which the aristocracy 'presented themselves to and for their equals in an elaborate performance of style within the framework of a competitive social spectacle'²⁹⁵. They were means to evoke 'aesthetic

²⁹¹ DIETZ and NUTZ (2005). p44

²⁹² SCOTT, Katie (1995). *The Rococo Interior – Decoration and Social Spaces in the Early Eighteenth-Century Paris*. Yale University Press: New Haven & London

²⁹³ DIETZ and NUTZ (2005). p62

²⁹⁴ BENNETT (1995). p41

²⁹⁵ DIETZ and NUTZ (2005). p46

pleasure' that 'was experienced in the company of a circle of knowledgeable visitors'²⁹⁶. The artists' cabinets have followed a different incentive. Here the combination of collected artefacts with works of art from their own production, presented in a carefully devised spatial and decorative setting would allude towards the concept of a *Gesamtkunstwerk*²⁹⁷. In accordance with 18th century aesthetic theory – on the establishment of a universal definition of beauty, for instance - the collections and display spaces of *cabinets de curiosités* by artists followed principles in which objects were arranged following 'aesthetic criteria' and placed in order to create 'spectacular, decorative ensembles'. The 'harmonious arrangement'²⁹⁸ of the individual parts was of equal significance as were the actual objects. It is here in particular the concept of the '*art de disposer*', the disposition of all constructive and decorative elements in order to achieve a coherent aesthetic architectural entity, as it was for instance theorized by the French architect Jacques-François Blondel (1705 – 1774), that led to the grouping and display of the exhibits 'in such a way that the senses and the spirit of the observer perceived a unity'²⁹⁹ [See Figure 22].

While the attempt to create a harmonious *Gesamtkunstwerk* is prevalent for many *cabinets de curiosités* it is of particular interest here that this exhibition type gives the primary producers of art and architecture for the first time the opportunity not only to display their works but to actually make the exhibition a 'work of art' in its own right. Just as much as the actual collected objects it was the stage-like setting of the exhibition spaces that was put on display. The combination of carefully designed interiors and display furniture with collected and purpose-produced works of art in the 18th century *cabinet de curiosités* is a development that should become of similar importance to the 20th century Avant-garde. Artists/architects such as El Lissitzky who created the *Kabinett der Abstrakten* of 1928 at the *Sprengel Museum* in Hannover as an experimental exhibition room would device similar techniques³⁰⁰ [See Figure 23]. In that respect, one can argue that the *cabinet de curiosités*, like its 20th century

²⁹⁶ Ibid. pp47-48

²⁹⁷ The concept of the *Gesamtkunstwerk* (Total work of Art) has been particularly used in German philosophy and art theory of the 19th century. It is often associated with Richard Wagner and his attempt to create with his operas this so-called 'total work of art'. The term is however also used to describe Baroque and Rococo architecture that had a particular interest in achieving their spatial and visual intentions through an inseparable combination of architecture, craft, and art.

²⁹⁸ DIETZ and NUTZ (2005). p57

²⁹⁹ Ibid. p60

³⁰⁰ One could also mention here Kurt Schwitters' *Merzbau*, also in Hannover, ca 1930

descendants, act as much as archives of objects as they are intellectual and aesthetic laboratories³⁰¹.

The first architecture museums – ideology and consumption

The thesis has already established that some of the aforementioned spaces and concepts of exhibiting collections – the *studiolo*, the *Kunst-* and *Wunderkammer*, the *cabinet de curiosités* – have at times used the term 'museum' in their name. In this respect, the term museum had already been used for quite diverse and partly contradictory concepts as well as spatial and social entities. It has also been established that, between the 14th and 18th century, a substantial shift occurred in the meaning of the term 'museum' from the early *museion* signifying a sacred place of the muses, to a place of scholarly exchange and furtherance of the arts and sciences, to a place containing a hidden collection, to a place to facilitate a more or less public display of this collection. Yet, all these differing concepts overlapped and partly continued to exist in parallel with one another. It is thus, as Gottfried Fliedl argues, that the term 'museum' had around 1800 still 'a much wider and ambiguous significance than it has today'³⁰². He argues that 'a clear relation between term and object could not exist as [the] very institutional configuration, which we call today almost without thinking 'museum', was only in its emergence'³⁰³.

It would digress to far from the actual topic of the thesis to give a full account of the circuitous crystallization process that led to the public museum in its institutionalized, physical as well as organizational form as we know it today³⁰⁴. This thesis therefore only focuses here on the actual architectural museum and its emergence and

³⁰¹ The *cabinets de curiosités* have often another laboratory dimension to them as they, in particular those that focus on natural history, contained veritable instruments for experimentation.

³⁰² Source: <http://homepage.univie.ac.at/gottfried.fliedl/> [Last accessed: 16.06.2008]

³⁰³ FLIEDL, Gottfried (2004). 'Museum ohne Objekt'. Talk given at conference 'Sammeln und Bewahren. Grundlagen des Umgangs mit Objekten'. Württembergisches Landesmuseum Stuttgart, 14. July 2004. Source: http://people.freenet.de/museumsvolontaere/pdf/Stgt04_fliedl.pdf [Last accessed: 16.06.2008]

The popular meaning of the term 'museum' as it was gradually established at the beginning of the 19th century was partly still, in Germany in particular, regarded as a philologically and historically incorrect use of the term. See: FLIEDL, Gottfried (ed.) (1996). 'Die Erfindung des Museums. Bürgerliche Museumsidee und Französische Revolution'. Verlag Turia+Kant: Vienna. In Italy, however, the term 'museo' is already established through the *Museo dei Capitolini* that publicly opened in 1734

³⁰⁴ This process has been extensively analyzed and documented by several authors and the thesis refers on many occasions to these sources. See in particular: BENNETT (1995); MCCLELLAN (1994); POMIAN (1990); FLIEDL (2004), IMPEY & MCGREGGOR(1985)

development. It deals with the question how this particular exhibition space was and can be used or appropriated for the Laboratory Exhibition. We will see that within this process of emergence there are several ideological, spatial and professional aspects that either support or hinder the laboratory exhibition.

Phyllis Lambert, founding director of the *Canadian Centre of Architecture*, maintains that architectural collections 'have only been recognized as the basis of a new entity, the architecture museum, since 1979 when some fifteen recently formed institutions met in Helsinki to form the International Confederation of Architectural Museums (ICAM)³⁰⁵. While this argument is understandable in order to support the newly established institutional cooperation between those 'young' architecture museums and centres³⁰⁶ it is questionable whether this statement is historically correct. Although the 1970s and the 1980s in particular saw a surge of new architecture museums emerging all over Europe and North America, they are by no means an entirely 'new entity'. In fact, museums that have been solely dedicated to architecture were already introduced at the end of the 18th century. Many of them were still not museums in our contemporary understanding of the term as they were in private hand or existed only for a limited period of time³⁰⁷. There exists also still confusion between the terms and concepts of the 'museum' and the 'gallery'. However, the thesis maintains that they have to be seen as experimental predecessors of our architecture museums today³⁰⁸.

Probably one of the earliest museums that focus exclusively or predominantly on architecture, and amongst the given examples the largest, is the *Musée des antiquités et monuments français* in the former Convent of the Petits Augustins in Paris. The Museum that contained French sculpture and buildings parts from the Middle Ages to the early 19th century is often considered to be the first museum to be organized in a

³⁰⁵ LAMBERT (1999). p308

³⁰⁶ Among them, the *Deutsches Architektur Museum* in Frankfurt, the *Institut français d'architecture* in Paris, the *Arkitekturmuseet* in Stockholm or the *Museum of Finish Architecture* in Helsinki.

For a full account of this meeting see: *Architekturmuseen – Architekturvermittlung, Kunstforum International*, Band 38, 2/1980.

³⁰⁷ According to Pomian this would not qualify them to be called a museum. He makes a clear distinction between publicly founded museums and privately owned collections that bare only the title of a museum. 'Private museums are simply collections which have borrowed a title associating them with something they are not'. Pomian maintains that it is 'permanence' and their public accessibility that are the main characteristics of the museum. 'The fact that [the] public museums are open to everybody also distinguishes them from private collections'. See: POMIAN (1990). p42

³⁰⁸ Cohen writes that they 'prefigured the creation of architectural museums'. COHEN (2001). p25

strict chronological order³⁰⁹ [See Figure 24]. It opened to the public in 1795 as the second Revolutionary museum and was closed again in 1816 during the Restoration³¹⁰. Instrumental in the creation of the *Musée des monuments français* was Alexandre Lenoir, an educated painter but a museum autodidact, who had been appointed by the Revolutionary *Commission des Arts* as the *Garde du Dépôt des Petits Augustins* in 1790. Lenoir had amassed the museum's collection in part on his own initiative, in part on the Commissions order. The aim was to save some of the most important building parts and sculptures from the at times controlled, sometimes anarchic destructions and demolitions of historic and ecclesiastical monuments during the first years of the French Revolution. The growing collection was housed in the Convent of the Petits Augustins that acted as a safe-keep before the collection was public in the museum³¹¹.

In 1795 the collection was made up of four categories of artefacts: antiquities (found in France), Celtic antiquities, monuments of the Middle Ages, and monuments of the Renaissance. However, these objects were, at first, not presented in such a historiographic order. McClellan describes Lenoir's first form of presentation as 'eclectic, resembling at first glance the display of paintings' in the *Grand Galerie* of the Louvre. According to McClellan, 'Lenoir had arranged his motley collection around the main cloister [...] with a view to visual effect. Sculptures and architectural fragments sharing the same provenance, [...] were here presented to the public out of order, indicating a deliberate intervention'³¹². But Lenoir tried more than to just convey a visual, eclectic effect with this collection. With the 'deliberate intervention', in which objects were ordered in their relation rather than in their difference to one another, Lenoir aimed to prove that there was a direct relation and lineage from the French

³⁰⁹ The *Villa Albani* in Rome, already completed in 1760, which housed the antiquity collection of Cardinal Allesandro Albani could also qualify for this position. Johann Joachim Winckelmann, one of the founders of modern art history (as well as librarian to Albini before becoming the 'Prefetto delle Antichità' or Prefect of Antiquities in Rome) was consultant for the collection and applied a specific historiographical order to its content.

³¹⁰ After the Restoration in 1816, the collection of the museum was partly redistributed to its previous owners and sites. The rest remained, from 1824 under the name *Musée de la sculpture français*, in the Louvre's *Galerie d'Angouleme* as well as, from 1836, in the *Musée de Versailles*. Violet-Le-Duc suggested in 1879 the reassembly of Lenoir's collection in the *Palais du Trocadéro* that had been empty since its erection for the *Exposition universelle* in 1878. The new museum was opened, only after Violet-Le-Duc's death, as *Musée de la sculpture comparée* in 1882. Extensions to the museum were made in 1886 and 1889 but it was closed again to make space for the 1937 exposition. It re-opened once again as part of the new *Cité d'architecture et du patrimoine* in 2006.

³¹¹ The *Hôtel de Nesles* was a second venue for this purpose but did not become a museum.

³¹² MCCLELLAN, Andrew (1994). *Inventing the Louvre*. Cambridge University Press: Cambridge. p162

Celtic culture to the Romans and back to the contemporary French. As such, he followed a clear curatorial concept that was supported by a specific ordering and display technique in which the curator created new knowledge and *new meaning*.

Yet when the antiquities of the collections were removed from the *Musée des monuments français* and exhibited in the *Louvre*, Lenoir's museographical concept broke down. Lenoir had to invent a new concept that dealt with the 'problem' of having a museum that contained only French and mostly medieval material. Around 1800 this material was not considered to be 'high art' or 'architecture'. Although the material was considered nationally relevant, Lenoir had to turn the artefacts into 'museum objects'³¹³. The way he did this was by arranging the objects in a strict historiographic or chronological order and presented them in period rooms. Through this contextualization he 'elevated' the medieval architectural artefacts and pieces of art into a realm in which their presentation was justified. McClellan speaks in this regard of a 'museography that re-creates the object'³¹⁴. By creating a new context for the object in which it is 'historicized' the artefacts become 'museum objects'³¹⁵. Putnam argues here similar when he writes that 'by exhibiting works of art, museums validate them as being worthy of preservation, conferring them an 'official' seal of quality and authenticity'³¹⁶. He calls this the 'practice of institutional validation'.

Lenoir's curatorial and hence creative achievement is to organize, for the first time, a public art or architecture museum in a strictly chronological manner. The chronological display was a new concept that had yet not been applied to other early museums or collections. From the 19th century onwards it should become the overriding model not only for the presentation of architecture but in the formation of the public museum in general. One could argue that this new form of display falls together with the discovery of 'historical time' as well as the establishment of new disciplines including history, art history, archaeology, or ethnology that were based on the concept and acknowledgement of historical time. Historicising 'principles of classification and display

³¹³ One has to remember here that classical Greek or Roman architecture, and those styles that referred to it, had been used as collection and exhibition material since the 15th century. It served the purpose to relate the then contemporary architecture – Renaissance, Mannerism, Baroque, and in particular Neo-Classicism – to its predecessors. These artefacts were used as demonstration and reference material. Medieval architecture, however, had, in 1795, not entered the canon of historical references for architecture or indeed any other cultural field.

³¹⁴ MCCLELLAN (1994). p155

³¹⁵ Ibid.

³¹⁶ PUTNAM (2001). p184

were alien to the eighteenth century' as Bennett argues³¹⁷. Until then, 'architectural styles [were] displayed in order to demonstrate their essential permanence rather than their change and development'³¹⁸. He maintains that 'the emergence of a historicized framework for the display of human artefacts in early-nineteenth-century museums was [...] a significant innovation'³¹⁹. But this innovation should also fundamentally alter the projective qualities of the museum. As we have previously seen, the early museums were not only a place to archive and passively display objects and artefacts but they were also places of active deliberation, experimentation and production. By becoming, as Fliedl calls it, the 'retreat of a historized art' and architecture the museum lost also its ability to be an active place for the production of art and architecture³²⁰. In this respect Lenoir's achievement is one step away from the museum's possibility to act as a laboratory.

One of the first of the rather small and private, yet publicly accessible museums, was Le Grand and Molinos' *Musée de l'ordre dorique* in 6, rue Saint Florentin in Paris. The museum was created in 1800 and housed on the top floor of a residential building that had already been built by Legrand and Molinos between 1792-1794³²¹. In order to indicate the new use as a museum Legrand and Molinos added in 1800 six Doric columns on the top-floor street facade. The museum had only a very short lifespan and closed already in 1802. Yet within this period its purpose is peculiar. The museum showed drawings and models of (Doric) Greek architecture from the architects' collection that had been amassed in the 1790s. Legrand and Molinos used the museum and material presented within it to champion the Doric style, the architectural

³¹⁷ BENNETT (1995). p75

³¹⁸ Ibid.

³¹⁹ BENNETT (1995). p76. For further exploration about the concept of time and history in the 19th century see: BANN, Stephen (1984). *The Clothing of Clío: A Study of the Representation of History in Nineteenth-Century Britain and France*, Cambridge: Cambridge University Press.

³²⁰ FLIEDL (2004). This critique was already expressed by some of Lenoir's contemporaries. In direct reference to Lenoir's museum, François-René Chateaubriand criticized that such museums made their exhibited objects only interesting to art historians [refer to Deschamps similar statement about his own museum]. And even Johann Wolfgang Goethe complaint already about the static nature of those museums 'to which nothing is added' and that become 'grave-like and ghostly ... instead of being [places in which one is] reminded that, as in live itself, art contains nothing finalised, but is something human and in constant flow'. [author's translation] Cited from UNGERS (2006) p27 [*Kunstkammern, Galerien und Museen, zu denen nichts hinzugefügt wird, haben etwas Grab- und Gespensterartiges ... anstatt daß man erinnert werden sollte, daß in der Kunst wie im Leben nichts Abgeschlossenes beharre, sondern ein Menschliches in Bewegung sei.*]

³²¹ Jacques-Guillaume Legrand (1743 – 1808) and Jacques Molinos (1743 – 1813)

language that they both favoured in their own work at that time. The museum could therefore be regarded as a sort of architectural propaganda tool.

A museum with a similar purpose, but operated by an institution, was the *Royal Architecture Museum* in London [See Figure 25]. The *Architectural Museum*³²² was initiated and created in 1851 by a group of architects of the so-called Gothic Revival including Gilbert Scott. It was intended as an educational museum for architects, architectural workmen as well as the general public in order to promote the neo-gothic style. Equipped with a collection of architectural models and casts to give those involved in the production of buildings the best examples to copy from, the educational program was supported by evening lectures and classes. The museum was at first housed in Cannon Row, before, in 1869, new premises designed by Joseph Clarke and Ewan Christian were built in Tufton Street. This building was enlarged to also house the *Westminster School of Art* in 1893. Finally, in 1903 the building and its entire content was handed over to the *Architectural Association* who subsequently held their first educational classes there³²³.

The specific stylistic orientation of the museum should also become its problem only several decades after its opening. Once the Neo-Gothic style was no longer of interest for the museum's intended audience it became an institution with no real purpose and rather a ballast for the *Architectural Association*. When the Association finally moved to Bloomsbury, the collection was acquired by the *Victoria & Albert Museum* where it is still partly shown in the large sculpture courts. In that respect, the collection, and to some respect the museum as well, had a longer fortune than Legrand and Molinos' *Musée de l'ordre doric* but its similar purpose as a propaganda tool proved to be too limited and static for it to be of a lasting effect³²⁴. In the moment where it did not any longer 'present the momentary reflections on historical and contemporary architecture'³²⁵, according to Pieper one of the main functions of architecture museums, the *Royal Architecture Museum* could no longer act as educational institution.

Another Parisian example around the same period of Legrand and Molinos' museum would be the *Galerie de Cassas* in 8, rue de la Seine. Founded in 1806, the artist and

³²² Royal status was granted from 1869 onwards

³²³ Although on a much smaller scale, one has here a similar combination of educational institution and museum as in the *École des beaux-arts*.

³²⁴ For further reading see: WYLDE, Peter (1981). 'The First Exhibition – The Architectural Association and the Royal Architecture Museum' in: *Architectural Association Annual Review 1981*. pp8-14

³²⁵ PIEPER (1980). p19

collector Louis-François Cassas exhibited, against an entry fee, drawings and models from his collection of Egyptian, Greek, Roman architectures that he made during his extensive travels between 1778 and 1792³²⁶. Cassas also produced a catalogue of the collection that would guide the visitors through the exhibition. According to Szambien, the ideas for a public exhibition of his collections dated already back to 1794³²⁷. Cassas also, in what could be regarded as a test case, presented several of his model and drawings of Greek and Roman buildings at the Salons in 1804, two year before the opening of his gallery. When looking at the internal view of the museum it is notable that the display technique of placing models on plinths in eye-height has not changed a lot between then and today [See Figure 26].

Contrary to Legrand and Molino, Cassas, who was not an architect, seems to have had no architectural-professional interest in propagating a specific style or architecture with his collection. The public display can rather be linked to the increasing popularity of the Grand Tour of Italy and Asia Minor. In that respect, Cassas would have served this curiosity and interest of a growing public to see and learn about these only recently re-discovered monuments and buildings of antiquity. For those, who could not afford to travel or wanted to prepare for such travel, Cassas' gallery would give the opportunity to study the architecture of antiquity. Given the fact that Cassas charged an entry fee to the exhibition and merchandised a catalogue one can regard the *Galerie de Cassas* as an early entrepreneurial enterprise in which architecture became a commodity that could be consumed through an exhibition³²⁸.

An architecture museum that only remained a project was Pierre-Adrien Pâris' *Galerie d'architecture* in Rome, dating from 1807³²⁹. In 1778, Pâris – also member of the Royal Academy and as architect closely affiliated with the *ancienne régime* - had been appointed by Louis XVI as royal 'dessinateur' or draughtsman. In this function Pâris was responsible for decorating court events, theatre, and funerals. He also designed state sets for the Paris Opera. There is here an interesting relation between the ephemeral nature of designing stage sets, decorations for events etc and the concept

³²⁶ For further reading see: SZAMBIEN, Werner (1988). *Le Musée d'Architecture*. Picard: Paris.

³²⁷ Ibid. p61

³²⁸ There exists no precise date until when the *Galerie de Cassas* remained open to the public, but in 1808 eighty cork models from the collection were bought by the French State and were consequently, together with further 745 cork and terracotta models, integrated into the collection of the *École des beaux-arts* where they served as teaching material. There exists also an illustration drawing of an anonymous *Galerie d'Architecture* from 1810 that presents casts and reliefs of Roman architecture that originate, as Szambien suggests, from Cassas' collection.

³²⁹ See also SZAMBIEN (1988). p23 and fig.6

of creating the scenography for an architectural exhibition. It is an argument that is supported by Peter Smithson in his essay about the relation between 'The Masque and the Exhibition'³³⁰. What exactly would have been exhibited in this exhibition is not known. Pâris had amassed a large collection of paintings and antiquities that might have been considered as a part of *Galerie d'architecture*. Yet at the time of the conception of this museum, Pâris was also interim director of the *Académie des Beaux-Arts de France* in Rome. One could therefore assume that works done by architects or 'pensioners' residing at the *Académie* were anticipated to become exhibits within the museum³³¹. If the *Galerie d'Architecture* would have been a privately owned and run or institutionally affiliated museum is not known but Pâris' position at the French Academy would allow to assuming the latter.

A last example of the 19th century shall here be the museum of Sir John Soane in Lincoln's Inn Field in London. Of all the given examples, it is probably the best known and the one most written about. It shall therefore only be mentioned briefly here and one should otherwise refer to the numerous publications³³². What differentiates the *Sir John Soane Museum* from the examples above is its hybrid nature in which the transition between a private home and public museum is constantly present. It has been described as an amalgam of a 'picturesque and enigmatic home, office, collector's trove, and personal showplace'³³³.

³³⁰ SMITHSON, Peter (1982). 'The Masque and the Exhibition: Stages toward the Real'. In: DI CARLO, Giancarlo (ed.) (1982). *Language of Architecture: Lectures, seminars, and projects. International Laboratory of Architecture and Urban Design, Urbino, 1981* Sansoni: Florence. pp62-67

³³¹ The 'pensioners' were winners of the *Prix de Rome* that were awarded a scholarship for a lengthy stay of three to five years at the French Academy in Rome. The Academy itself was founded in 1666 by Colbert and housed first in various location before moving in 1725 into the *Palazzo Mancini* and in 1802 into the Villa Medici, where it remains until today. The *Prix de Rome* was already established in 1663 under Louis XIV. The various categories of the *Prix de Rome* were: painting, sculpture, etching, musical composition, and, from 1720 onwards, also architecture.

³³² For further reading on Sir John Soane's Museum see:
SUMMERSON, J., WATKIN, D., MELLINGHOFF, T. (1983). 'John Soane'. *Architectural Monographs*. no.8. Academy Editions: London
MILLENSON, Susan Feinberg (1987). *Sir John Soane's Museum*. UMI Research Press: Ann Arbor
FURJÁN (2002)

³³³ Press text: *John Soane 1753–1837 - The Legendary John Soane Outside the Confines of His Eccentric London Museum*. Exhibition at the CCA, Montréal, 16 May - 3 September 2001
Helen Furján gives the following summary of the museum: 'The house and museum at 13 Lincoln's Inn Fields, London, which was formally turned over to the British public in 1837 following the death of its owner, Sir John Soane, operated on a variety of levels. It was a model townhouse, demonstrating a proper gentlemanly abode and a diversity of architectural invention within a restricted space. It was a connoisseurial collection, demonstrating Soane's taste and discernment. It was a didactic collection, in which the house itself provided as much instruction as the objects it contained. It was an antiquarian collection, displaying inscriptions of culture and

The museum was officially opened to the public after Soane's death in 1837. But its origins as collection and even as exhibition place date further back. Soane had, from 1792-1824 consecutively built and re-built three adjacent houses in Lincoln's Inn Field. These houses with their constantly changing spatial arrangements to enhance the 'poetic effect' contained not only Soane's private home and office but an increasingly larger portion of them was used to store and display Soane's growing collection. Some of the collected artefacts, casts, antique and medieval building parts were here not only exhibited, but also became part of the houses themselves. Soane's collection consists to a large part of architectural material like cork models of buildings of antiquity, casts of antique building parts, architectural *veduti*, but also a very substantial collection of architectural drawings and an extensive architectural treatises. Yet, it is not in the same sense a purely architectural museum as the previous examples have been as the remit of the collection crossed in any neighbouring art discipline or cultural field³³⁴. In this respect his collection and the museum is still embedded in the pre-19th century integral perception of architecture and the arts. It is also closer to the *cabinets des curiosités* with their aim to create a sensual and 'curious' over-all environment rather than a purely academic or scientific arrangement presented in a more or less 'neutral' space [See Figure 27]. Building, exhibition and social activity are inseparable in Soane's museum.

Soane's Museum is also interesting in its aspect of being decisively an educational place aimed for the benefit of architectural students. When Soane became Professor of Architecture at the *Royal Academy* in 1806, 'Soane began to arrange his books, casts and models in order that the students might have easy access to them'³³⁵. Students were invited to visit the museum on the day before and after Soane's lectures at the *Royal Academy*. In reaction to this multi-layered function, John Britton, who had published the first description of the museum in 1827, coined Lincoln's Inn Field an 'Academy of Architecture'³³⁶. Soane's museum had thus an affinity with the *museion* or

history. And it was a catalogue of architectural detail and form. But above all, 13 Lincoln's Inn Fields was a collection of spectacular spaces designed to leave a lasting impression on the visitor. In: FURJÁN (2002). p12

³³⁴ For a full inventory of Soane's extensive collection including such diverse artefacts and works of art as an Egyptian sarcophagus, paintings by Hogarth and Canaletto or medieval coins see: 'A New Description of Sir John Soane's Museum', first published in 1955 by the Trustees of the Museum

³³⁵ DOREY, Helen (2002). 'Sir John Soane's Museum, London'. in: *ICAM Newsletter*, July-December 2002. p7

³³⁶ quoted in: DOREY (2002). p7

the early Renaissance academies. It is here, where one can find the museum's strongest relevance for the laboratory exhibition³³⁷.

One can summarize that what Soane's museum and all the previous examples have in common is that in the museum exhibition the creative impulse is transferred to the museum's curator. This curator, as has been shown, may or may not be also an architect. Yet the new contextualization of the exhibited objects according to the curator's agenda alters, or even recreates the architectural objects. It is here, that the museum can become, as a place of architectural production, also an experimental environment. In the case of Legrand and Molinos, Gilbert Scott and his companions or John Soane this experimental production is still driven by architects, or the *architectus ingenio* as Evelyn had called them. In the case of Lenoir, Cassas or Pâris on the other hand, we are dealing already with Evelyn's *architectus verborum*³³⁸. One can also establish that these few very early examples of architecture museums reflect Cohen's assertion that the architectural museum, as a category, is 'as comprehensive as it is elastic'³³⁹.

The earliest 'museums' of the 15th to 17th century, and the *museion* in particular, still described just a collection or even only an immaterial concept. In the case of those museums mentioned above, the term 'museum' is still used in a way that signifies, at the same time, the collections of architecture and art as well as the buildings in which these artefacts and collections are kept. Their formal ambiguity is thus partly incorporated in their signifying term. Towards the second half of 19th century this ambiguity is gradually lost. The meaning of the 'museum' should shift now almost completely from the content to the building itself. This shift is crucial as it is here that the multi-layered meaning of the museum – including its role as place of the production – gets increasingly suppressed. By focussing on the institutionalized container, the material form and a specific building typology, other meanings and other contents that do not fit into these new containers get pushed to the background and are ultimately excluded from the museum. This made their use as a locale for the laboratory exhibition gradually more difficult.

³³⁷ Whether this relevance indeed continued after Soane's death and the public opening of the Museum is, however, questionable. Its preservation in the precise state of 1837 froze (once and for all?) the ongoing spatial, curatorial and educational laboratory that the houses and the 'museum' had previously been.

³³⁸ See also Chapter 2, Section 'The personification of architecture', p26

³³⁹ COHEN (2004). p8

It should become one objective of architects, artist and curators of the early 20th century avant-gardes to challenge again the institutionalised museum and its exhibition praxis. One would have to name here in particular Alexander Dörner and his attempts to transform the museum into a form of 'Kraftwerk' [Power House] that would be used by artist to produce art rather than just exhibit finished work³⁴⁰.

Architecture biennials – curated spectacles

I think that exhibitions like the Venice Biennale are almost indigestible. They are far too big. It's almost like going to a supermarket, you can't take it all in. But you're bound to find something that you find interesting, even if you explore only 20% of the actual exhibits.

Stuart MacDonald in an interview conducted with the author, 30.07.2005

As in the previously discussed museums, a biennale constitutes an exhibition form in which the production of meaning is transferred to the curator. A decisive difference between the museum exhibition and the biennale is obviously its temporality. A biennial usually lasts only between two and four months. As defined through its very name it is furthermore an exhibition event that reoccurs on a two-yearly basis. Somewhat paradoxically, however, it is not the 'same exhibition' that re-occurs every two years, quite the contrary. It is rather within the nature of the biennials that every new exhibition has to be distinguishable from its predecessor. In combination, it is thus the relatively short time span, paired with the sheer size of these events and the inherent novelty of each event that predestines the biennials as a media spectacle, a state which none of the above curated exhibitions of collections in museum ever achieved.

In contrast to previous and following sections that explored an exhibition type and locale through several examples, this section will focus almost entirely on one example, the Venice Biennale and here the Architecture Biennale in particular.

La Biennale di Venezia

The *International Architecture Exhibition* of the *Fondazione La Biennale di Venezia* (henceforth here named only Venice Biennale) presents today the most important and the largest recurrent architectural exhibition event. While art biennials have been common for a much longer period, with the *Biennale di Venezia* being the model for all succeeding art biennials, architectural biennials present a relatively new exhibition format. Besides Venice, there are today also architecture biennials in Sao Paulo (7 manifestations since 1973, as architecture biennial preceding even Venice), Ljubljana

³⁴⁰ DÖRNER, Alexander (1959). *Überwindung der "Kunst"*. Fackelträger: Hanover. p181

(3 manifestations since 2002), Rotterdam (3 manifestations since 2003), London (2 manifestations since 2004³⁴¹), as well as in Istanbul, Beijing (first manifestation in 2004), or Moscow (first biennale to be held in 2008) to name but a few. Additionally one has to mention all those art biennials that have also architecture sections or show architecture in an art context.

Like many art biennials, architecture biennials, and the Venice Biennale in particular, have lately become major cultural spectacles. This is reflected through their increase in sheer size as well as the raising visitor numbers. For the Venice Architecture Biennale these have almost doubled over the last 6 years or 4 Architecture Biennales from 70.000 to 130.000 visitors³⁴². In terms of their exhibition programme and exhibits architecture biennials are mostly complex and multi-layered structures with often a plethora of thematically marked-off exhibition parts or sections, individual contributions, and most diverse exhibition media³⁴³.

A particularity of biennials in comparison to exhibitions of architectural museums or institutes lays within the usually changing curatorship and organization team from one show to another. This implies that each biennial is always a completely new conception, following its own intrinsic ideology, trying to distinguish itself from the previous exhibition. Rather than being part of a continuous exhibition programme that reflects a mid- to long-term exhibition strategy or policy devised by an exhibiting institution like an architecture museum, the new biennial and its curators are forced to conceptually and financially out-do its predecessor.

The specific locality of the Biennale di Venezia

The site of the Venice Biennale exhibitions are traditionally the *Giardini di Castello* with their purpose build exhibition pavilions, but have always also took place in appropriated venues throughout Venice, where, during the last decade, the *Arsenale* developed as

³⁴¹ The *London Architecture Biennale* has been rebranded for 2008 as the *London Festival of Architecture*. See www.lfa2008.org [Last accessed: 16.06.2008]

³⁴² Source: <http://www.labiennale.org/en/biennale/history/> [Last accessed: 16.06.2008]
7th Architecture Biennale [AB] *Less Aesthetics – More Ethics* in 2000 - 70.000 visitors; 8th AB *Next* in 2002 - 101.000 visitors, 9th AB *Metamorph* 115.000 visitors, 10th AB *Cities – Architecture and Society* in 2006 - 130.000 visitors
Visitor numbers for the different art forms together reach up to 320000 visitors per year, still only a fraction of the 17 million tourist visiting Venice each year

³⁴³ The *10th International Architecture Exhibition of the Biennale di Venezia*, for instance, showcased besides the main exhibition *Cities – Architecture and Society*, related but separate exhibitions of 50 participating countries, 3 thematically independent exhibitions, 3 exhibitions by partner initiatives, and in total the works of 520 architects, architectural practices or institutions. Numbers collected from: FONDAZIONE LA BIENNALE DI VENEZIA (2006). *Cities – Architecture and Society*, Exhibition Catalogue Vol. 1+2, Marsilio: Venice

an equally important exhibition venue. The *Giardini di Castello* or *Giardini Pubblici* were originally built under Napoleon in 1807 as the *Giardini Napoleonici* at the then southeast tip of Venice. They were first converted into an exhibition park for the *Esposizione nazionale artistica* (Italian National Arts Exhibition) of 1887. Temporary exhibition buildings were erected along the waterfront and in a parallel line to those on what constitutes today one of the two main axes of the Giardini area. In addition to those long buildings a series of smaller pavilions were dispersed on the site, the biggest one of them being the *Palazzo dei Concerti* that should become the nucleus of the main exhibition building, the *Palazzo dell'Esposizione*, later called the *Palazzo Pro Arte* and today known as the Italian Pavilion³⁴⁴.

The development of the overall spatial concept for the exhibition area thus followed with its landscaped garden and the combination of a larger, main exhibition building – the Italian Pavilion and a series of individual, foreign national pavilions that of the world exhibitions which were held elsewhere at the turn of the century [See Figure 28]. In contrast to temporary pavilions at world exhibitions the national pavilions in the Giardini, with few exceptions, were and are permanent buildings – although many of them have been altered or rebuilt in the course of the Biennale's existence. The first national pavilion opened in 1907 with the Belgian pavilion designed by Léon Sneyers. Until 1914 those of Hungary (1909), Germany (1909), Great Britain (1909), France (1912) and Russia (1914) followed. Today, a total of 26 permanent national pavilions are today in operation within the *Giardini*.

One can argue that these pavilions form already an architectural exhibition in their own right. The illustrious group of architects that designed pavilions for the *Giardini* include Alvar Aalto (Finnish Pavilion), BBPR (Canada), Sverre Fehn (Pavilion of the Nordic Countries), Josef Hoffmann (Austria), Gerrit Thomas Rietveld (Netherlands), Carlo Scarpa (Venezuela), or Aleksej V. Scusev (Russia)³⁴⁵ [See Figure 29]. But while the collection of exemplary buildings of one particular architectural typology – namely that of the exhibition pavilion – as well as their spatial layout within a designated and defined exhibition site is similar to other building exhibitions that showcase 'permanent' buildings (*Mathildenhöhe*, Darmstadt; *Weißenhofsiedlung*, Stuttgart; *Interbau '54*, Berlin etc) the *Giardini* and its pavilions differ in terms of their evolutionary history. Rather than all being built at the same time and therefore presenting a section of the architectural discourse of a particular period, the pavilions also represent a time travel

³⁴⁴ For a concise description of the building history of the Biennale pavilions see MULAZZANI, Marco (2004). *I padiglioni della Biennale di Venezia*. Electa: Milan

³⁴⁵ See MULAZZANI (2004)

through a twentieth century architectural history. The Giardini thus house an eclectic mix of different architectural styles ranging from Romanticism, to Neo-Classicism, Art Nouveau, Modernism, Brutalism or Regionalism.

Architecture among the Arts

While the Venice Biennale was originally conceived as a cultural event that showcased only contemporary visual arts it later diversified and created separate sections for fine art, music, film, theatre, dance and architecture. Whereas music, film and theatre were already introduced in early thirties, architecture did not become a separate exhibition section until 1980³⁴⁶. Yet from 1975 onwards the *Fondazione La Biennale di Venezia* held already a number of architecture and design exhibitions in conjunction with the visual arts Biennale that were then curated by the Italian architect Vittorio Gregotti. These exhibitions ranged from one on the German *Werkbund* to one on Italian modernism during Fascism or to one on the Italian designer Ettore Sottsass³⁴⁷.

In 1979, under the directorship of Paolo Portoghesi, the architectural section of the Biennale became finally independent from the visual arts Biennale. Its first manifestation came with the exhibition *Venezia e lo spazio scenico* in 1979-80 in which Aldo Rossi's swimming *Teatro del Mondo* formed one of the most iconic and lasting architectural exhibition contributions of the decade [See Figure 30]. As an emblematic expression of a new architectural language as well as a temporary yet functioning architectural structure, the *Teatro del Mondo* stood in a tradition that goes as far back as the ephemeral Renaissance and Baroque architectures of public and courtly festivals over the pavilions of the world expositions to the scenographic propaganda installations of the Russian Revolution.

The first architectural Biennale proper, the *Prima Mostra Internazionale di Architettura*, entitled *La presenza del passato* [The Presence of the Past], was held in 1980³⁴⁸. Staged in the *Corderie dell'Arsenale*, and not in the usual Biennale venue of the

³⁴⁶ Fine Art, 51 editions since 1895; Music, 50 editions since 1930; Film, 63 editions since 1932; Theatre, 38 editions since 1934; Architecture, 10 editions since 1980; Dance, 4 editions since 1999.

³⁴⁷ *Werkbund 1907, Il razionalismo e l'architettura in Italia durante il fascismo*, Ettore Sottsass, *un designer italiano*, all in 1976

³⁴⁸ The history of the Architecture Biennale is henceforth erratic and doesn't necessarily take place on a bi-annual rhythm. It also varies in scope and size and changes its main location between the Arsenale, the Giardini and various locations within the city of Venice before becoming, since the 7th Biennale, the spectacle in its present size and the double location of Arsenale and Giardini. The national pavilions, that had always played crucial role for the visual art Biennale, are only used since the 5th Biennale in 1991.

Giardini di Castello, it had the seminal *Strada Novissima* as its main exhibition part³⁴⁹. The installation of the *Strada Novissima* consisted of twenty, seven meter high façade segments with individual exhibitions behind them that were designed by twenty invited architects representing a wide spectrum of (mostly) post-modern architecture³⁵⁰. It formed both a coherent, theatrical and imaginative streetscape within the interior of the *Corderie*, celebrating 'the re-discovery of the street as spatial continuum' as Lampugnani writes³⁵¹, as well as a 'gallery of architectural self-portraits', as Portoghesi describes it³⁵² [See Figure 31]. Paolo Portoghesi articulated the idea behind the creation of the *Strada Novissima* as 'Thinking *with* architecture and not *about* architecture' [author's translation]³⁵³. Architecture is here presented by architects and through architecture. It is thus not only a reflective but a creative and in the end experimental approach that relates to the praxis of the Laboratory Exhibition³⁵⁴.

³⁴⁹ Other exhibition parts were: *Ernesto Basile architetto; L'oggetto banale/The Banal Object; Mostra dei critici/Exhibition of Critics; Mostra dei giovani architetti/Exhibition of Young Architects; Omaggio a Cardella, Ridolfi, Johnson/Homage to Cardella, Ridolfi, Johnson*.

³⁵⁰ The invited architects included a.o.: Leon Krier, Hans Hollein, Venturi, Scott-Brown, Rauch; Frank O. Gehry; Rem Koolhaas; Arata Isozaki; Ricardo Bofill or Christian de Portzamparc.

³⁵¹ LAMPUGNANI (1981). p48

³⁵² "Gallerie di autoritratti architettonici" quoted in LA BIENNALE DI VENEZIA (eds.) (2006). *Un secolo di architettura alla Biennale e in Europa*. Marsilio: Venice. p42

³⁵³ "Pensare *con* l'architettura e non *sulla* architettura" quoted in LA BIENNALE DI VENEZIA (eds.) (2006). p42

³⁵⁴ This experimental approach should only come to the fore again with the 6th and 7th Biennale.



Figure 20: Museum Kircherianum in the Collegium Romanum of the Vatican, founded 1651 and named after its first curator Anthansius Kirchner.

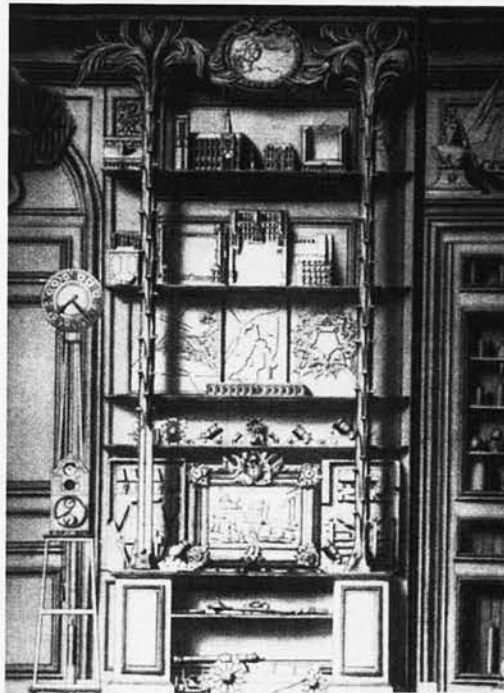


Figure 21: Jean-Baptiste Courtonne, The Physics Cabinet of Bonnier de la Mossons, c.1730. The picture shows models of churches, palaces and fortifications but also a number of mechanical tools and instruments.

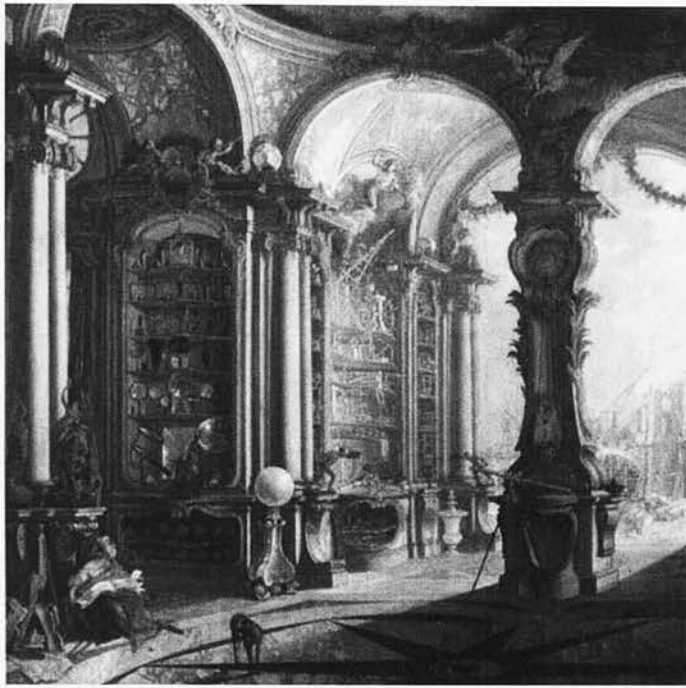


Figure 22: Jacques Lajoue, Foyer of the Physics Cabinet of Bonnier de la Mossons, 1734 (Collection Sir A. Beit).

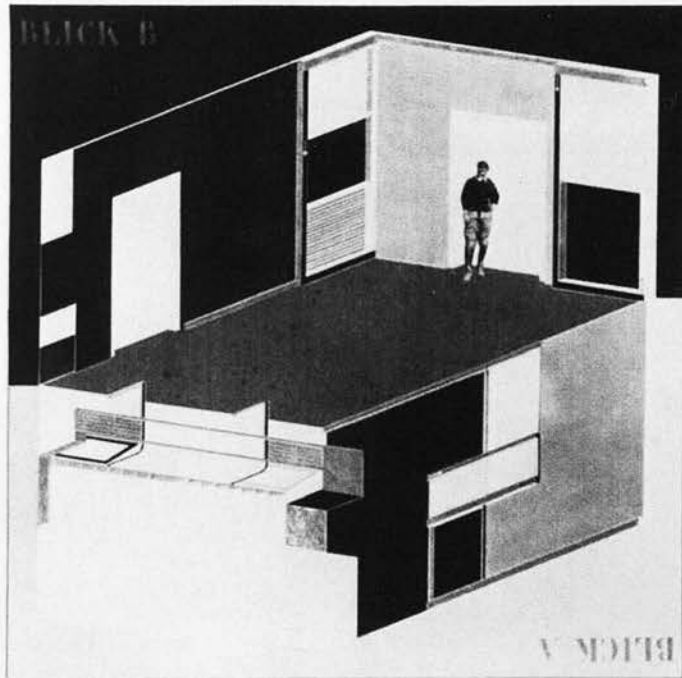


Figure 23: El Lissitzky, Design for the Kabinett der Abstrakten, 1927.

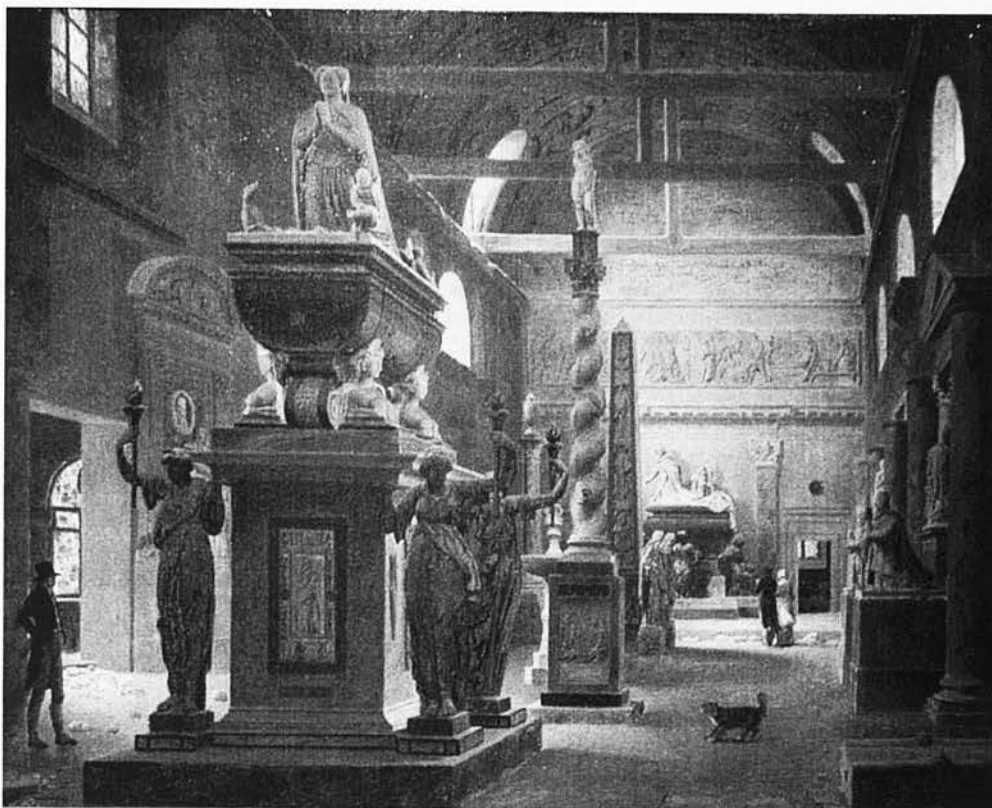


Figure 24: Jean-Lubin Vauzelle, La salle d'introduction du musée des monuments français, c.1800 (Musée Carnavalet).

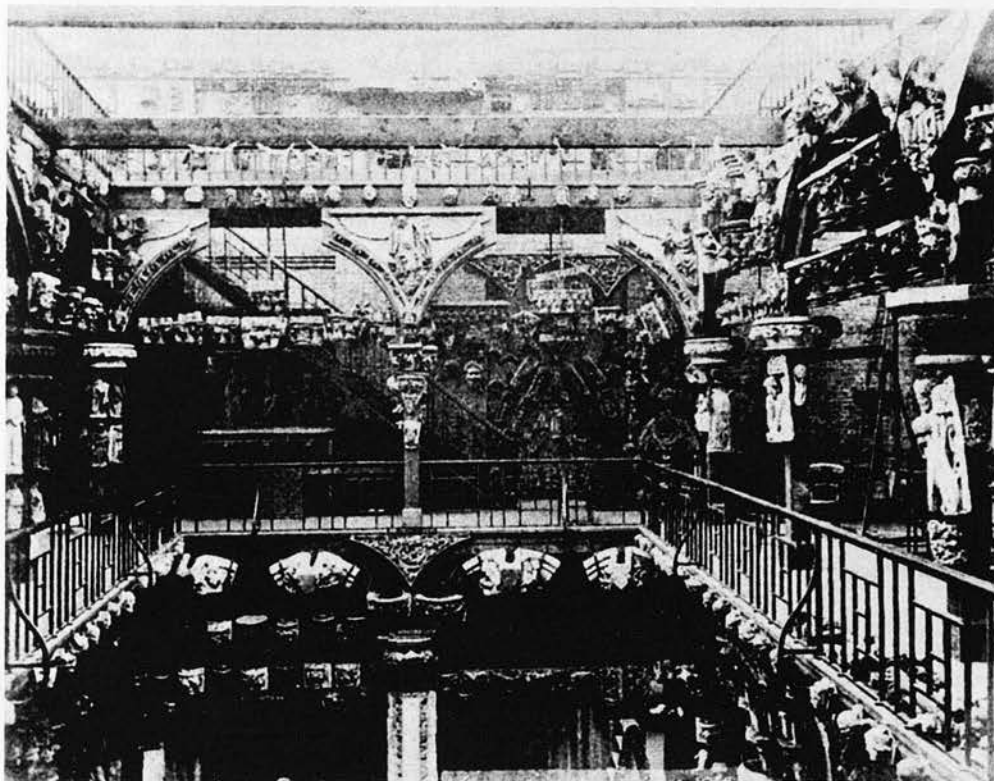


Figure 25: Interior of the Royal Architecture Museum, London, photograph by Beford Lemere, 1869 (CCA Montreal)

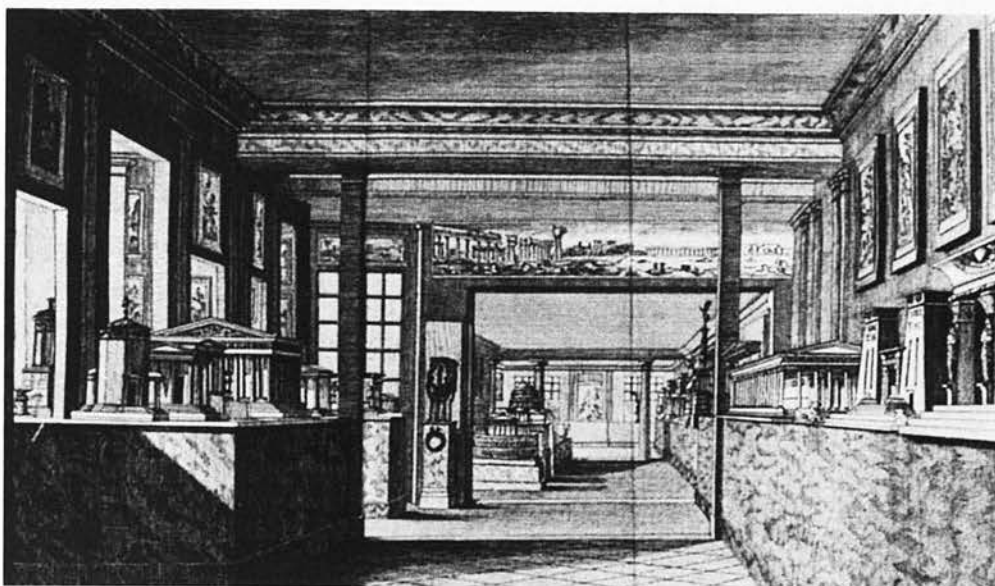


Figure 26: Bonvalet, engraving after Bance, interior view of the Collection Cassas, 1806.

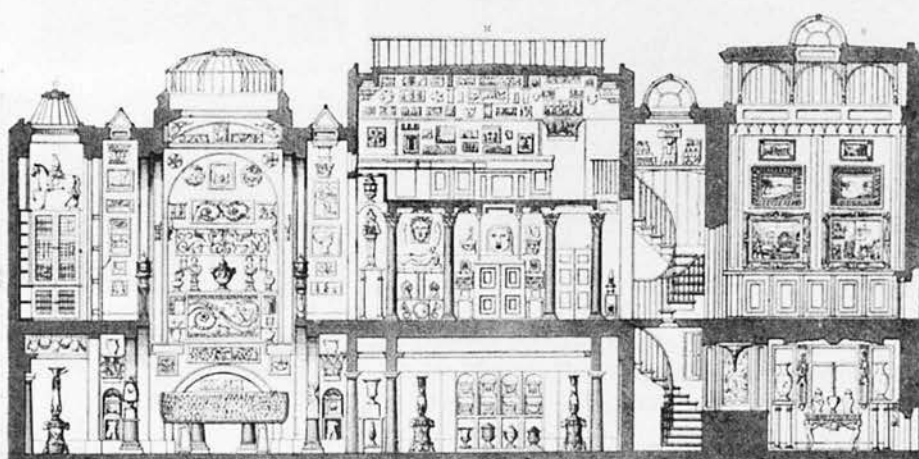


Figure 27: Section through the Sir Joan Soane Museum, 1827.

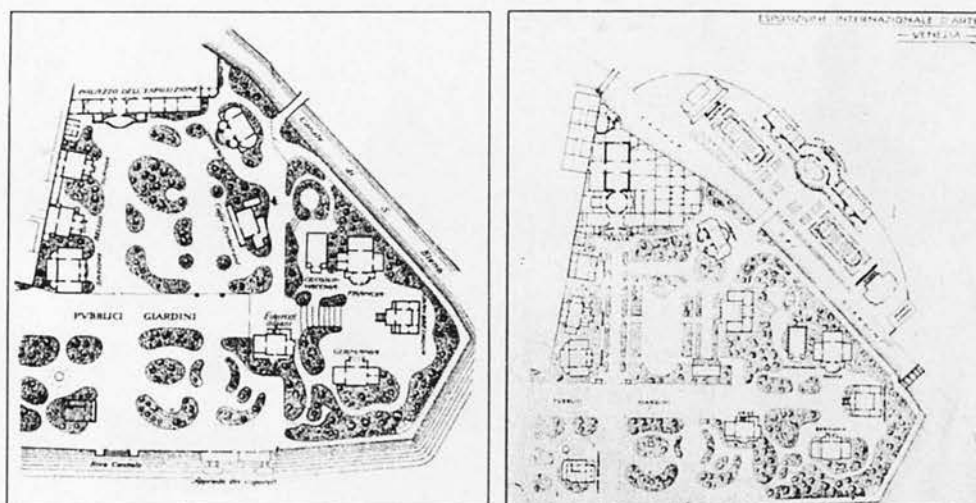


Figure 28: Plan of the Giardini della Biennale in 1926 and 1934. On the right plan one can see the addition of the Italian Pavilion as well as the extension north of the Canale dei Giardini.

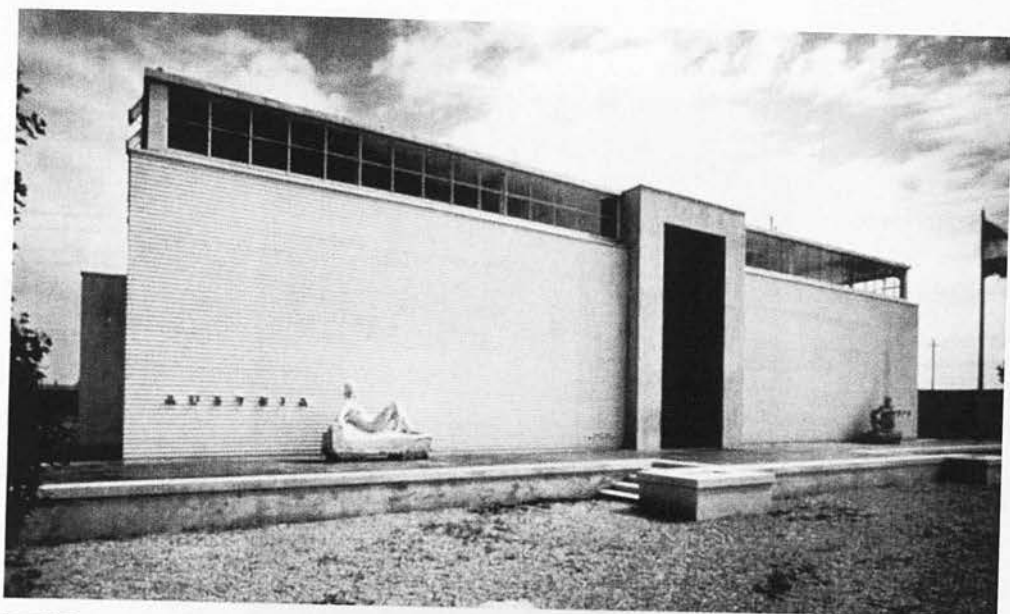


Figure 29: Various pavilions in the Giardini, top: Austria by Josef Hoffmann from 1934; left middle: Switzerland by Bruno Giacometti, 1952; left bottom: Belgium by Léon Snyders, 1907; right bottom: Finland by Alvar Aalto, 1956.



Figure 30: Aldo Rossi's Teatro del Mondo, 1979/80, part of the exhibition Venezia e lo spazio scenico.

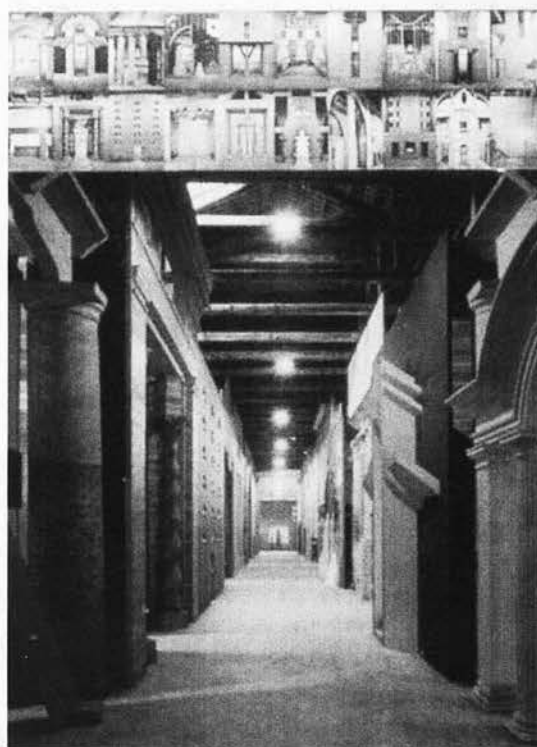


Figure 31: Exhibition Poster of the Strada Novissima at the 1st International Architecture Biennale in Venice, entitled *La presenza del passato*, 1980.

CHAPTER 7 – The Laboratory in 'Real Scale'

Why does one do architecture exhibitions? On the one hand to place a certain architectural work, an architectural position into a new context. But besides this more intellectual aspect, one really wants to engage and provoke an audience emotionally. And we are talking here predominantly of an audience that is primarily not interested in architecture. To achieve this one has to create real spatial experiences.

Kristin Feireiss in an interview with the author, 01.12.2005

Exhibitions allow for simplification. When the buildings are not meant to survive forever they allow for more freedom in respect to firmness, in respect to durability, and they can make bolder statements. They can reinforce radicalism.

Jean-Louis Cohen in an interview with the author, 17.08.2005

This chapter examines three forms or locales of so-called life-size or 1:1 laboratories. These are world expositions, building exhibitions, and architectural installations in the public realm. In each of these examples, architects have the opportunity to use a temporal exhibition to experiment with architecture on a technological, spatial, social or cultural level. Of these three examples, the world expositions are clearly the largest events, - both in their sheer scale as well as in visitor numbers. We are, however, here less concerned with the whole phenomena of the world expositions and their ideological, political, economic and generally cultural significance for the 19th and early 20th century. What is of interest here are the actual exhibition buildings that are used by architects, and engineers, in order to experiment in 'real scale' on a future architecture. And it is this aspect that relates the world exposition to the building exhibitions as well as the architectural installation³⁵⁵.

³⁵⁵ The thesis refrains here from elaborating on a specific 1:1-exhibit that is referred to almost automatically in relation to architectural exhibitions, namely the temporary exhibition pavilion. The probably most iconic and most written about pavilion is here Le Corbusier's *Pavillon de l'Esprit Nouveau* at the 1925 *Exposition Internationale des Arts Décoratifs et Industriels Modernes* in Paris. In the same category and similarly revered would be Melnikov's Soviet pavilion at the same exhibition. The reason why these two pavilions or similar examples are omitted here is on the one hand that they are already featured in a plethora of publications. On the other hand, one can examine the principles that make these pavilions a form of architectural laboratory already with the much earlier large exhibition halls of the world expositions.

For the *Pavillon de l'Esprit Nouveau* see for instance:

COLOMINA, Beatriz (1995). 'The Media House' in: *Assemblage*, No.27. August 1995. pp55-66

GRONBERG, Tag (1992). 'Speaking Volumes – The Pavillon de l'Esprit Nouveau'. in: *Oxford Art Journal*, Vol 15, No.2. pp58-69

VERONA, Irina (1997). 'Uncontained Displays: Exposing Architecture' in: *Precis – GSAP Student publication*, no.14, Columbia University, download source:

<http://www.arch.columbia.edu/Pub/Precis/site/14/articles/iverona/iverona.html> [Last accessed: 16.06.2008]

Also: LE CORBUSIER (1925). *Almanach d'architecture moderne. L'Esprit Nouveau*. Cres: Paris. In this self-publication Corbusier promotes and defends his pavilion and the presented urban designs.

For Melnikov's Soviet Pavilion see in particular:

STARR, S. Frederick (1981). *K. Mel'nikov – Le Pavillon Soviétique, Paris 1925*. L'Equerre: Paris

World expositions – exhibition laboratory of the 19th century

At the same time as the public museum was established as the prime locale for the systematic collection and archiving, the display of institutionalized knowledge, and the education of the masses, another more transient or temporary form of exhibiting to a mass-audience became to prominence. While the 19th-century-drive for exhibiting found one expression in the 'Birth of the Museum'³⁵⁶, its counterpart should be established in the so-called World Exhibitions or Expositions. It is not the remit of this work to survey the entire historical development of the world exhibitions nor can we go into depth to explore the multi-faceted economic, social, political, and ideological aspects of them. However, as in the case of the previously examined locale and moments of exhibitions, one also has to look here at some of the world exhibitions' more general preconditions and characteristic in order to understand the multi-layered relation and influence between this exhibition typology and their role for the architectural laboratory exhibition.

The aspect that most architectural histories explore is the one of the exhibition building as being the actual architectural exhibit. The argument here is that it were those large ingenious exhibition halls and the later emerging exhibition pavilions that acted themselves as exemplary architectures on display and that had consequently a significant impact on the general development of architecture. Yet the world exhibitions and their sub-forms have a wider significance for the exhibition of architecture. Firstly they have also been places in which architecture or parts thereof, new construction techniques or building technologies have been exhibited as declared exhibition objects within these aforementioned exhibition buildings [See Figure 32]. Secondly, beyond these contemporary displays of architecture, ensembles of 1:1 replicas of a supposedly historical or vernacular architecture formed an ideologically important counterpart to the prevailing presentation of progress at these exhibitions [See Figure 33]. And thirdly, world exhibitions should become a testing ground for new display techniques, curatorial ordering systems and spatial arrangements, or inventions of 'viewing machines' or 'exhibition machines'³⁵⁷ that should become important for later experimental exhibitions of architecture [See Figure 34].

The following sections will examine the important role that exhibition buildings played in the exhibition of architecture as well as the other three above-mentioned aspects and we will see how these aspects have, to a varying degree, relevance in regard of the

³⁵⁶ See BENNETT (1995)

³⁵⁷ FRAMPTON, Kenneth, (1992). *Modern Architecture – A Critical History*. Penguin: London.
p35

development of the architectural Laboratory Exhibition.

World exhibitions were specific expressions of the social and economic forces of the second half of the 19th century, the time in which they came to prominence. As such they are regarded as being imbedded within a general increase of exhibition activity or, what Bennett calls the birth of the 'exhibitionary complex' in the 19th century. According to Pieper 'architecture exhibitions are part and result of the common drive for exhibiting in the 19th century, - and here of the world exhibitions in particular'³⁵⁸. However, world exhibitions did not come out of no-where. They had their predecessors in the industrial exhibitions of the early 19th century. One of the earliest, was, in 1756, the *Arts, Manufactures and Commerce Exhibition* initiated by the *Society of Arts* in London³⁵⁹. Exhibitions in the English manufacturing centres Manchester, Liverpool or Birmingham followed. In France, these exhibitions were established in Paris shortly after the French Revolution. The first one of these exhibitions, the *Première exposition des produits de l'industrie français*, was held in 1798. They were essentially national exhibitions and, as Giedion asserts, 'intended as a sort of peoples festival, in celebration of the freedom from guild restrictions that the Revolution had brought [in 1791]'³⁶⁰. They were held at a designated exhibitions site, the *Champs-de-Mars* which had already been used for Revolutionary festivals celebrating the fall of the monarchy and the *Ancienne Regime*. The location should later be re-used for several of the world exhibitions in Paris.

These early industrial exhibitions were, and this links them to all later world exhibitions, an occasion to present the latest technical achievements, new products and commodities, machinery and production processes. Other countries followed with similar national industry exhibitions, before the first truly international exhibition, the *Great Exhibition of the works of industry of all Nations*, was held in London in 1851³⁶¹.

³⁵⁸ PIEPER (1980). p27

[*Architekturausstellungen sind Teil und Ergebnis der allgemeinen Ausstellungsfreudigkeit des 19. Jahrhunderts, vor allem der großen Weltausstellungen.*]

³⁵⁹ The *Society of Arts* (today *Royal Society of Arts*) stems from an initiative instigated by the painter and social William Shipley in 1754. The aim of the society was to 'support improvements in the liberal arts, sciences and manufactures'. The Society awarded prizes for activities and achievements in the categories 'Agriculture, Chemistry, Colonies & Trade, manufactures, mechanics as well as Polite Arts (painting and sculpture)'. The first exhibition is held in conjunction with the first medals awarded by the Society in 1756.

Source: www.thersa.org/about-us/history-and-archive/rsa-history-timeline [Last accessed: 16.06.2008]

³⁶⁰ See GIEDION (1949). p179

³⁶¹ There had been already earlier plans for an international exhibition in Paris that should have been held in 1843, but objections by French manufacturers led to the abandonment of the project.

World exhibitions, and their various sub-forms, should from there on be a dominant mode of exhibiting on a large scale. They became thus one of the most distinguishable public events of the second half of the nineteenth century. Bennett rates the world expositions as being 'among the most distinctive [...] symbolic inventions [of modernity]'³⁶². This symbolism is to a large extent made manifest through the architecture of these exhibitions. The exhibition buildings epitomize, then and still today, the social, cultural and economic significance of the world exhibitions. Regarding the importance of exhibitions for architecture of the 19th century Pieper asserts that world exhibitions 'elevated architecture into the status of an exhibit in the very moment when architecture created no longer [...] the natural framework of the social life and became itself an exceptional event'³⁶³ [author's translation]. However, one could argue that the 19th century is full of new building typologies and architecture that provided this very framework of a changing social life. Examples here would be the railway stations, the grand hotels, the museums, theatres and amusement parks but also the sanatoriums and prisons. Rather than being exceptions, exhibitions and the exhibitions buildings were part of the general phenomenon of newly emerging buildings typologies for a mass-audience.

In contrast to the cultural institutions of previous centuries that were only accessible for a limited stratum of social groups, namely nobility and the newly emerging bourgeoisie, the world exhibition, like many other 19th century phenomena, were intended for the broader masses. In this respect they were both specifically formed for the masses as well as formed by the masses. The former is reflected in the creation of new large exhibition buildings and exhibitions parks that could accommodate the growing numbers of visitors. The latter finds its expression in the rendering of the exhibition as a spectacle. Giedion notices here that the great exhibitions acted as a sort of 19th century public festival³⁶⁴. And Manfredo Tafuri emphasizes the spectacle aspect of the world exhibitions when he writes 'that the great expositions [like arcades and the department stores of Paris, were] places in which the crowd itself becomes a spectacle'³⁶⁵. In this respect, the voyeuristic as much as exhibitionist aspects of being

³⁶² BENNETT (1995). p209

³⁶³ PIEPER (1980). p27

[Die (Welt)ausstellungen machen Architektur zum Exponat, ganz folgerichtig in einer Situation, in der sie längst nicht mehr und immer weniger den selbstverständlichen Rahmen des gesellschaftlichen Lebens abgibt, sondern selbst zum außergewöhnlichen Ereignis wird.]

³⁶⁴ GIEDION (1949). p179

³⁶⁵ TAFURI, Manfredo (1976). *Architecture and Utopia: Design and Capitalist Development*, MIT Press: Cambridge, Mass. p83

part of the crowd, of joining a 'media spectacle' are important qualities for the success of the world exhibitions.

However, the festive and spectacle character remained partly in contrast to some of their other functional and utilitarian rationales. The practical or utilitarian as well as ideological aspects of the world exhibitions lay in the presentation and promotion of progress. They were geared towards an international display of national achievements in the realms economic power and imperial or colonial hegemony, cultural and material productivity, or technological and social invention. To use Giedion's words, the world exhibitions 'were the product of the liberal conception of economy: free trade, free communication, and improvement in production and performance through free competition'³⁶⁶. According to Giedion 'the chief purpose of the early exhibitions [was to] to bring together ... [inventions of new machines and new processes and] to display them side-by-side, and thus facilitate their comparison and adoption'³⁶⁷.

In order to allow for this comparison, the exhibits had to undergo a specific transformation that distinguished them from objects in previous forms of exhibitions (as well as those in art exhibitions of the time). In the development from the *cabinets des curiosités* to world expositions, the exhibited objects made the crucial transformation from being unique artefacts, exhibited for their *singularity*, to objects being displayed as a *representative* of a particular group of objects. At the same time, these exemplary objects became the placeholders or representatives for an even broader innate topic – namely 'progress'. Bennett underlines this when he argues that the object and the way in which they were ordered served the 'underlying rhetoric of the exposition form [as being] one of progress'³⁶⁸. The way in which this was achieved was by creating an 'evolutionary series', ordering the exhibits 'whether a raw material, instrument of production; whether a work of art or of manufacture; whether from Britain, India, France or America [...] as representative of a stage within an evolutionary series leading from the simple to the complex'³⁶⁹.

This ordering concept within exhibitions was already partly developed and tested prior to the first world exhibition in London in 1851. The earlier-mentioned industrial exhibitions of the late 18th and early 19th century in England and France applied the

³⁶⁶ GIEDION (1949). p180

³⁶⁷ Ibid. p178

³⁶⁸ BENNETT (1995). p213

³⁶⁹ Ibid.

'message of progress [through] the arrangement of exhibits [...] in a series of classes and subclasses'³⁷⁰. Beside the presentation of a national industrial achievement this form of exhibiting had a further educational aspect and was used, as Bennett puts it, as 'vehicle for the technical education of the working classes'³⁷¹. As such the focus of these exhibitions was predominantly on the mediation of process, from the raw material over its machine processing to the final product³⁷². While this aspect of mediating the process in order to educate remained one aspect at the world exhibitions they should be predominantly be concerned with the presentation of products. The exhibitions became, as Benjamin wrote already around 1938, the 'places of pilgrimage to the fetish commodity'³⁷³.

Yet besides the dominating commercial aspect of the exhibitions there existed also various other incentives behind them. The huge popular success of the world exhibitions³⁷⁴ could not have been explained solely by a celebration of imperial ambitions, technological progress, and bourgeois liberalism. In order to have such a lasting effect and relevance, the world exhibitions had to have also a deeper, although partly disguised, social and cultural function. According to Pieper the 'world exhibitions were the magical mirror of the century that only reflected its most idealized feature'³⁷⁵. [author's translation]. The interpretation of the exhibition as a mirror of society and its cultural or social aspiration is an aspect that links to Georges Bataille's interpretation of the museum. He interpreted the museum as the 'colossal mirror in which man finally

³⁷⁰ Ibid. p81

³⁷¹ Ibid.

³⁷² This educational aspect of such exhibitions should remain one main tradition also in the exhibiting of the building process and development of building technologies. It can be found in museums such as Thomas Twining's museum from 1866, the *Deutsches Hygiene Museum* in Dresden opened in 1930, the *Musée national des travaux public* in Paris, opened in 1939, or, more recently, the *Building Exploratory* in London.

³⁷³ BENJAMIN, Walter (1973). *Charles Baudelaire: A Lyric Poet in an Era of High Capitalism*. Harvard University Press: Cambridge, Mass. p165
Original German Version: *Charles Baudelaire: Ein Lyriker im Zeitalter des Hochkapitalismus* as one part of a trilogy on Baudelaire that only got published in full after his death. Benjamin started working on Baudelaire in the 1923 with translations of the French author's works.

³⁷⁴ The 1851 exhibition in London had already six million visitors. These numbers had increased in the 1889 to more than 28 million. See: MATTIE (1998). p75

³⁷⁵ PIEPER (1980). p27
[*Die Weltausstellungen sind der magische Spiegel des Jahrhunderts, der nur die idealsten Züge zurückwirft.*]

contemplates himself in every aspect, finds himself literally admirable, and abandons himself to the ecstasy expressed in all the art reviews³⁷⁶.

While this 'mirror function', the reflection of society's own interpretation of its achievement and progression is one interpretation of the world exhibitions' underlying incentives, Sigfried Giedion offers also another reading of the world expositions which he expresses in his book *Bauen in Frankreich*: 'From agriculture, mining, from industry, from the machines, that are shown in their use, to the raw materials and to the processed materials, to the arts and the crafts. In all this lies a curious need for a premature synthesis that belongs to the 19th century [and can be found also] in another area – the *Gesamtkunstwerk*. The intention was, besides the undoubted utilitarian reasons, to evoke the vision of the human cosmos in its new movement'³⁷⁷. [author's translation].

To regard the 19th century world exhibitions as *Gesamtkunstwerk* is interesting in as much as it relates also to the previously discussed creation of the artistic micro cosmos of the 17th century *Wunderkammer* and 18th century *cabinet des curiosités*³⁷⁸. While the concept of the *Gesamtkunstwerk* is already partly present as an idea in the Baroque ensembles that combined various arts into one total work of art, the term *Gesamtkunstwerk* is of course only coined in the 19th century. It is first used in 1827 by Eusebius Trahdorff in his book *Ästhetik oder Lehre von der Weltanschauung und Kunst*. The term and the concept became then to prominence through Richard Wagners 1849 book *Kunst und Revolution*³⁷⁹. In that respect, the emergence of the concept of *Gesamtkunstwerk* and that of the World Exhibitions happen at the same time and might indeed have been of mutual influence³⁸⁰.

³⁷⁶ BATAILLE, Georges (1930) 'Museum', trans. Paul Hegarty. Original text: 'Musée', *Dictionnaire Critique*, 5. p300. in: LEACH, Neil (ed.) (1997). *Rethinking Architecture – A reader in cultural theory*. Routledge: London. p23

³⁷⁷ GIEDION, Sigfried (1928). *Bauen in Frankreich*. Klinkhardt & Biermann: Berlin/Leipzig. p37 [Alle Zonen, ja, oft rückblickend, alle Zeiten. Von Landwirtschaft, Bergbau, von der Industrie, von den Maschinen, die man in Tätigkeit zeigte, bis zu den Rohmaterialien, bis zu den verarbeitenden Stoffen, bis zu Kunst und Kunstgewerbe. Es liegt darin ein merkwürdiges Bedürfnis nach verfrühter Synthese, die dem 19. Jahrhundert auch auf anderen Gebieten eigen ist – Gesamtkunstwerk. Es wollte, neben zweifellos utilitären Gründen, die Vision des in neuer Bewegung befindlichen menschlichen Kosmos entstehen lassen.]

³⁷⁸ See PART II, Chapter 6

³⁷⁹ TRAHNDORFF, Karl Friedrich Eusebius (1827). *Aesthetik oder Lehre von der Weltanschauung und Kunst*. Maurer: Berlin
WAGNER, Richard (1849). *Die Kunst und die Revolution*. Wiegand: Leipzig

³⁸⁰ On the *Gesamtkunstwerk* in relation to Modernism and architecture see: HERMANSEN, Christian and HVATTUM, Mari (2004). *Tracing Modernity, Manifestations of the Modern in*

The relation between the world exhibitions and the architectural exhibition or the exhibition of architecture is a multi-faceted one. As mentioned in the introduction, many architectural historians have singled out the world exhibitions of the second half of the 19th century and the beginning of the 20th century as the decisive moment for the emergence of the architectural exhibition. Indeed, most of these architectural histories do not mention any developments and forms of architectural exhibitions that precede the world exhibitions. One could argue that the sheer size of the world exhibitions, both in terms of their spatial extension as well as in terms of their visitor numbers, their economic, cultural and ideological impact on the 19th century society, as much as their extensive documentation in all sorts of print media of the time presented architectural historians with unprecedented material regarding the architectural exhibition.

The aspect that most architectural histories explore is the one of the exhibition building as being the actual architectural exhibit³⁸¹. The argument here is that it were those large, ingenious exhibition halls and the later emerging exhibition pavilions that acted as exemplary architectures on display and that had thus a significant impact on the general development of architecture. The few, well-selected, pivotal architectural and engineering masterpieces at the world exhibitions on which these architectural histories mainly focus 'fit' into a line of argument that sees the main impulses for the architectural development in the second half of the 19th century coming from the realm of engineering and the new iron and steel constructions in particular. Pevsner, for instance asserts that 'since London had led off the world exhibitions in 1851, these highly sponsored international representations ... have produced a series of buildings that influenced the architecture of this world'³⁸². And Giedion writes that 'in the second half of the nineteenth century ... industrial exhibitions afforded truly creative architecture its best opportunities'³⁸³. World exhibition became a place to create new architecture that could not be realized in other context. While this is partly due to the fact that some building typologies, namely the great exhibition halls, were not needed

Architecture and the City. Taylor and Francis: Oxford. Here in particular Chapter 10 'Timely Untimeliness? Architectural Modernism and the idea of the Gesamtkunstwerk'

³⁸¹ See PEVSNER et al. (1987); LAMPUGNANI (1981); PIEPER (1980); BENEVOLO (1978); FRAMPTON (1992) to only name a few.

³⁸² PEVSNER et al. (1987). p51

[Seit London 1851 den Reigen der Weltausstellungen eröffnete, gab es in der Architekturausstellung dieser stets hochgesponserten und nationalen Werbung dienenden internationalen Repräsentationen eine Reihe von Bauwerken, die die Architektur der Welt beeinflussten.]

³⁸³ GIEDION (1949). p178

in any other social and environmental context, the world exhibitions were nevertheless the locale where, as Pevsner puts it, 'architecture could be presented to a general public in a deliberate 'pose' that architecture was denied in everyday life' [author's translation]³⁸⁴. The exhibitions furthermore presented the locale for an experimental architecture, a place in which new constructions techniques, spatial concepts and societal organization and curatorial classification systems were tested for the first time. In this respect they formed a laboratory that furthered the development of architecture.

According to Lampugnani 'there are five basic ways in which exhibitions influenced the development of architecture'³⁸⁵ and the world exhibitions form[ed] one of these categories. He calls the world exhibitions 'exhibitions which do not have directly architectural themes, but in whose contexts significant architecture nonetheless arises'.³⁸⁶ Whether this influence on an architectural development was always intentional or whether the buildings in question were indeed regarded as architecture is here another question. Lampugnani, for instance, acknowledges the long-term influence of the world exhibitions on the development of architecture, but he also questions the view 'presented by orthodox historians' that they could be regarded as the 'prelude to the new, rationalistic style of the twentieth century'³⁸⁷. He argues that the world exhibitions, 'with their technical master pieces [...] concealed a deep-seated crisis in architecture' rather than presented anything more 'than a materialistic adulation of technology, pursued at this point with no claims to architectural or artistic virtue'³⁸⁸. The last remark relating to the perception of the exhibitions and their buildings is

³⁸⁴ PIEPER (1980). p27

[Auf den Weltausstellungen konnten] mit großer publizistischer Wirkung ... spektakuläre Architekturprojekte verwirklicht werden, konnten hier in aller Öffentlichkeit die Architektur in einer Pose vorgestellt werden, die ihr im Alltag versagt blieb ...].

³⁸⁵ LAMPUGNANI (1981). p30

³⁸⁶ Ibid.

The other four ways in which exhibitions influenced the development of architecture are according to Lampugnani:

- exhibitions, which use texts, diagrams, models, and photographs to display architecture in public and explain it.
- exhibitions in which model buildings in the scale of 1:1 have been put up temporarily (*Die Wohnung unserer Zeit*)
- exhibitions of buildings under whose auspices various interconnected constructions are erected and used at first for inspection purposes and later for the ends they were designed to fulfil. (*Weißenhofsiedlung*)
- buildings, estates and towns which, through they are not created in the course of some specific exhibition, can nonetheless be seen as models and demonstration, and which exert a programmatic influence within the profession (*Chandigarh*)

³⁸⁷ Ibid. p36

³⁸⁸ Ibid.

crucial. At the time of the exhibition, buildings such as the Eiffel Tower and the *Galerie des Machines* would commonly not have been regarded as 'architecture' but as engineering structures. It is only in retrospect that we understand their full significance as being part of an avant-garde architecture³⁸⁹. This poses the question, whether it is indeed sufficient when the experimental and propositional character is understood by those perceiving the experiment (at the time or in retrospect), or if architectural experiments have to be intended per se by the very producers of them³⁹⁰.

The role of the engineer at the world exhibitions

The producers of these architectural experiments or experimental structures were first and foremost not architects but engineers. In some cases they came from altogether different disciplines, like in the case of Joseph Paxton, creator of the *Crystal Palace*, who was a gardener and whose building experience came from the creation of green houses. In those cases where both engineers and architects worked on the exhibitions structures, it was usually the contribution of the engineer that is regarded, at least in retrospect, as the innovative part of the collaboration while the role of the architect was 'limited' to the artistic decoration of the building. One could argue that it was precisely the late 19th-century-architects' historicist perseverance in clinging to a coded use of stylistic elements that prevented the architects from taking on the opportunity that the world exhibition offered. The relatively new discipline of engineering, on the contrary, was lacking such a pre-existing cultural context in which the architects were entangled. This allowed the 'engineer [to reign] supreme' as Frampton puts it³⁹¹.

Inseparable from the rise of the engineer is the discovery, development and improvement a new building material – iron. By the mid 19th century, iron and iron constructions were 'everywhere regarded as the medium of expression most truly appropriate to the period'³⁹² as Giedion notes. Yet the new material was still largely rejected by the architectural discipline. It was down to the engineers to deal with every part connected to the material iron and the iron construction. While the architect was responsible for decorating the construction with ornament or disguising it with a

³⁸⁹ One can relate here Lampugnani's argument about the indirect architectural themes of the world exhibitions to Pieper who calls the world expositions between 1851 and 1889 "hidden architectural exhibitions". He refers to them as "hidden" as architecture is 'not the central exhibition topic, but only the framework, an addition and decorative enhancement'. See PIEPER (1980). p29

³⁹⁰ Joseph Paxton as well as Gustave Eiffel, for instance, also produced and showcased 'architecture' in a historicized, conventional manner that was in stark contrast to the ingenuity of their respective famous exhibition buildings.

³⁹¹ FRAMPTON (1992). p34

³⁹² GIEDION (1949). p180

supposedly load-bearing stone façade it was the engineer that dealt with the truly new elements of the new 19th century typologies, namely the large vaulted roof spans with glass-iron coverings. Giedion speaks here of the 'the vaulting problem', (the question how to span over large spaces) that 'played the same important role [in bringing forth the 'highest architectural expression'] in the nineteenth century as it did during the Renaissance or the Baroque period'³⁹³.

The world exhibitions were of course not the only field where engineers could explore and apply new technologies, new materials, or new constructions. The late 18th and the entire 19th century offered the engineer a whole set of new buildings tasks and new building typologies that called for new organizational and spatial forms as well as approaches in manufacturing and construction³⁹⁴. The reason why the 'the [world] exhibition became the trial ground for new methods [of construction]'³⁹⁵, as Giedion puts it, is two-fold. Firstly, it is the temporary nature of the exhibition buildings. Secondly, the attempt to 'improve upon [every] last exhibition' that specifically 'encouraged the experimental employment of iron in [the exhibition buildings] construction'³⁹⁶. Giedion continues: 'In all the great international exhibitions – from the first at the *Crystal Palace*, London, in 1851 to the last at the end of the century – constructors attempted tasks that had never been faced before. When their experiments succeeded in this special field they became a part of the standard building practice'³⁹⁷.

The temporary nature of the exhibitions paired with an official pressure as well as a creative curiosity from the side of the engineer to produce impressive new structures of ever increasing size, lightness or efficiency made the world exhibitions similar to ephemeral events in previous centuries where architects used festive decorations,

³⁹³ GIEDION (1949). p183

³⁹⁴ For railway stations, arcades and green houses as other typologies, similar to structures at the world exhibitions and in which the engineer played decisive role see:
BIDDLE, Gordon (1986). *Great railway stations of Britain: their architecture, growth and development*. David & Charles: Newton Abbot
BIDDLE, Gordon (2003). *Britain's historic railway buildings - an Oxford gazetteer of structures and sites*. Oxford University Press: Oxford
GEIST, Johann-Friedrich (1969). *Passagen – Ein Bautyp des 19. Jahrhunderts*. Prestel: München;
KOHLMAIER, G. and SARTORI, B. von. (1991) *Houses of Glass - A 19th-century building type*. MIT Press: Cambridge, Mass.

³⁹⁵ GIEDION (1949). p180

³⁹⁶ Ibid.

³⁹⁷ Ibid.

masques and stage designs as spatial and decorative experiments. The incentives and processes of these earlier temporal experiments were similar to those of the experiments at the world exhibitions that, once successfully tested, would be introduced into more lasting architectural projects.

Architectural exhibits at the world exhibitions

While the exhibition buildings are perpetuated as main architectural exhibit by many architectural historians, it is as important to look at the architecture that has been exhibited within those buildings or in the surrounding exhibition areas. One can here distinguish between two main groups. The first group comprises predominantly exhibitions and exhibits that displayed a then contemporary and progressive architecture or parts thereof. This would include the display of new decorative styles and elements, latest construction techniques, new building materials, issues regarding sanitation and hygiene, technical inventions, such as elevators, interior decoration. This group is in line with the exhibition of other new products, manufacturing processes or technological achievements that were displayed on these world exhibitions³⁹⁸ [See Figure 34]. The incentive behind these exhibits is predominantly a promotional one. The second group includes exhibitions of historical and/or local architecture. This would usually comprise of collections of mostly vernacular and/or generic buildings depicting an often never existing historical ensemble of a particular country or city [See Figure 33]. They were used to create an architectural illusion, to evoke a specific sentiment and to disguise, or openly display, an ideology³⁹⁹. The 1:1 scenarios at the world exhibition had no projective quality. Yet their importance lies on the one hand in the popularization of the exhibition of architecture and on the other hand on the establishment of the real size architectural exhibit.

The Exhibition of Model Housing

Thematically associated with the first group of exhibitions and exhibits that displayed a contemporary and progressive architecture and yet in terms of their size more in line

³⁹⁸ In the second half of the 19th century one can find similar displays of architecture and building activity in numerous municipal or semi-private exhibition and museums covering such as issues as sanitation and hygiene in buildings, new materials and work process etc. An example here would be Thomas Twining's 'Museum of Domestic and Sanitary Economy' from 1869 in Twickenham. See also: MARCUS (1993). p227

³⁹⁹ While using similar techniques, the pseudo-historical ensembles of world exhibitions are distinctively different from those 'urban stage sets' of the Renaissance and Baroque that, besides having a primary use of providing the background for a festival or spectacle, presented these settings in order to experiment with a new architecture.

with the second group of ensemble exhibitions of historical and/or local architecture would be the exhibition of 1:1 model houses. The 'model house', or, more specifically, the 'house for working class families' should form one specific type of architectural exhibit at the world expositions that combined the promotional agenda of exhibiting new commodities with the contextual and educational display of technological and social progress through the medium of the 1:1, life-size building. Ultimately, these forms of exhibits, at first usually single buildings, later also groups of buildings, should lead to a discrete category of architectural exhibitions – the building exhibitions which will be explored in the next section.

The first of these model houses were already showcased in the 1851 *Great Exhibition*⁴⁰⁰. The two real-size 'Model Houses for Four Families' were designed by the architect and housing reformer Henry Roberts (1803-1876)⁴⁰¹ [See Figure 35]. Their construction and exhibition was instigated by Prince Albert who was also instrumental in the planning and execution of the 1851 *Great Exhibition*⁴⁰². These houses were at the time regarded as 'a contribution not less important, and in many respects far more interesting than most of the works of art and utility within [the *Crystal Palace*]'⁴⁰³. The two-story-houses contained four separate flats that were accessed from a common, open stairway. Their exemplary model character was particularly due to their sanitary equipment and their spatial layout. The introduction of sanitation, private toilets, sculleries and heated airing cupboards were surely 'ameliorations of working-class housing conditions'⁴⁰⁴ as Bennett puts it. However, the flat layout was also ideologically motivated. There was a clear functional distinction between the living room and the three bedrooms, a distinction that was by no means the standard in working-class housing of the time. The bedrooms were also specifically assigned to parents and to

⁴⁰⁰ They were shown opposite the Crystal Palace, on the grounds of the *Hyde Park Barracks*

⁴⁰¹ From 1825 onwards, Roberts, a born American, was involved in the design of industrial housing. Since 1844 he was connected to the Society for Improving the Conditions of the Labouring Classes. The houses were demolished after the exhibition yet one house was rebuilt in Kennington Park. Roberts also developed the type presented at the 1851 exhibition further into multi-story tenement buildings. The increase in stories was already anticipated in the 1851 exhibition and explained in the exhibition publication. For an in-depth insight into Henry Roberts' intentions of improving the working-class housing conditions see: ROBERTS, Henry (1861). *The Progress and Present Aspect of the Movement for Improving the Dwellings of the Labouring Classes*

⁴⁰² Prince Albert (1819-1861), husband to Queen Victoria, was founding president of the Royal Commission for the Exhibition of 1851. Established in 1850, the Commission was responsible for organizing the exhibition.

⁴⁰³ *Illustrated London News*, June 14, 1851
Source: <http://www.victorianlondon.org/houses/modelhousing.htm> [Last accessed: 16.06.2008]

⁴⁰⁴ BENNETT (1995). p82

either boys or girls, the two latter being only accessible, and hence surveyed, from the parents' bedroom. In this way they 'provided for that separation which, with a family, is so essential to morality and decency' as the *London Illustrated News* wrote. The 'Model House for four families' can be regarded as the application and testing ground of Victorian bourgeois living ideals and moral standards on working-class housing.

We also witness here the combination of exhibition motives for model houses that should remain valid until today. According to the *London Illustrated News* from 14th of June 1851 the houses were designed and exhibited 'with the view of conveying practical information calculated to promote an improvement in the dwellings of the working classes, and of stimulating visitors to the Exhibition, whose position and circumstances may fit them for the task, to imitate his example'⁴⁰⁵. On the one hand we have the incentive of the experiment in which new spatial, formal, social and/or technological aspects are tested. We can speak here of the exhibition as a laboratory. This is also partly expressed in an address made by Prince Albert in 1851 in which he states that the 'Exhibition of 1851 is to give us a true test and a living picture of the point of development at which the whole of mankind has arrived [...]'⁴⁰⁶.

On the other hand, these exhibitions follow a clear promotional incentive; and the promotion can here either be following an economic or an ideological/educational agenda. This promotional incentive is expressed again in a quote from the *London Illustrated News* from 1851 that states that the purpose of the exhibition of these model homes was 'to prove to the capitalist that such buildings would yield a fair return for the money invested in them, to make the dwellings of the bulk of the people more worthy of the intelligence and good feeling of the age than they are now'⁴⁰⁷. And Cynthia Zaitzevsky asserts that 'it was through the Great Exhibition that the model housing movement came to international attention'⁴⁰⁸. One could argue that it was partly due to the economic drive of these exhibitions that allowed individuals and societies involved in the construction and improvement of working-class housing to present these houses which otherwise might not have found the necessary funding for

⁴⁰⁵ Ibid.

⁴⁰⁶ EASTLAKE, Elizabeth (1862). 'The Late Prince Consort; Prince Albert's Speeches', in: *Quarterly Review*, London, 1862

⁴⁰⁷ *Illustrated London News*, June 14, 1851
Source: <http://www.victorianlondon.org/houses/modelhousing.htm> [Last accessed: 16.06.2008]

⁴⁰⁸ ZAITZEVSKY, Cynthia (1983). 'Housing Boston's Poor: The First Philanthropic Experiments'. In: *The Journal of the Society of Architectural Historians*, Vol.42, No. 2 (May 1983). p163

their production. Bennett speaks here of a 'sponsoring' by the world exhibitions of the 'display of architectural projects'⁴⁰⁹.

From that moment on, the exhibition of model houses and display of architectural projects intended to improve the conditions of working class housing became a constant feature in world exhibitions. The 1867 *Exposition universelle* in Paris showcased model housing intended for low-income labourers that were designed by M.S. Ferrand [See Figure 36]. The actual layout of this house was less progressive than the previous London example by Roberts but it was innovative in regard of its construction technique using a cast-iron frame and infill walls made of cavity bricks. In this respect there was an ever shifting emphasis in the display of model houses between innovations of technical aspects and those of social or cultural nature. This dialectic should remain a constant in the specific form of the building exhibition that emerged from the world and trade exhibitions and came into its first fruition at the start of the 19th century.

Building exhibitions – testing new forms of housing

The previous section dealt with an exhibition type where the exhibition building became, deliberately or accidentally, an experimental exhibit in its own right and but where also single, mostly residential, buildings – the 'model homes' – were presented along side other commodities and material forms of 'progress'. Through these forms of exhibits the development towards the building exhibition was already instigated in the first world expositions. This point is substantiated by Cramer and Gutschow who write that 'the step towards the building exhibitions – to realize substantial contributions for architecture in the scale of 1:1 – was supported since the first world exhibition in 1851 in London'⁴¹⁰ [author's translation].

With the new typology of the building exhibition these model houses would now

⁴⁰⁹ BENNETT (1995). p82

⁴¹⁰ CRAMER, Johannes and GUTSCHOW, Niels (1984). *Bauausstellungen – Eine Architekturgeschichte des 20. Jahrhunderts*. Kohlhammer: Stuttgart, Berlin, Köln. p10 [Der Schritt zur Bauausstellung – zur Realisierung grundsätzlicher Beiträge zum Bauwesen im Maßstab 1:1 – wurde seit der ersten Weltausstellung des Jahres 1851 in London mit ihren zahlreichen nachfolgenden Ausstellungen wesentlich begünstigt.]

One should further include here the numerous exhibitions about building materials as well as the garden exhibitions that both stem from the earliest world exhibitions and have later influenced the set-up of the building exhibitions.

become the veritable topic of the exhibition⁴¹¹. In the 20th century building exhibitions present one of the main strands in exhibiting architecture and are as a category – partly because of their lasting legacy in built form – a favoured object for those architectural histories that deal with the architecture exhibition. Furthermore, single building exhibitions should become milestones in the development of modernist architecture (and planning), the prime example being the *Weißenhofsiedlung* in Stuttgart from 1927.

Building exhibitions are housing exhibitions

To differentiate from all other related exhibition forms, Cramer and Gutschow define a building exhibition as an event that is constituted through 'real buildings in their natural size. During the exhibition, these buildings have to be accessible to the exhibition audience and they have to be furnished and usable according to the their [future] usage. The totality of design, construction and furnishing is therefore crucial element of the building exhibition that is always combined with the intention to present exemplary solutions for the given design brief'⁴¹². They further state categorically that 'Building exhibitions are housing exhibitions. Not one building exhibition ignores the topic "housing"'⁴¹³ [author's translation].

These parameters make it almost inevitable that the building exhibitions also happen outside, in a 'natural' setting that is usually within a defined site where the exhibited buildings form some sort of coherent ensemble. In most cases these sites are found on green fields, somewhat on the fringes to existing cities and in a spatial relation to the cities ongoing, planned or predicted extension. In this respect they are similar to many

⁴¹¹ Despite the new building exhibitions, the world expositions and other large national expositions, like the 1951 *Festival of Britain*, continue to showcase model buildings and housing ensembles. The *Festival of Britain*, for instance, had as part of its display of a modern, post-war Britain the construction of the LCC Landsbury Housing estate in Poplar that was advertised as a 'Live Architecture Exhibition'. Another seminal example would be Moshe Safdie's *Habitat '67* housing complex that was part of the 1967 world exposition in Montreal.

⁴¹² CRAMER and GUTSCHOW (1984). p12

[Im folgenden wird unter der Bezeichnung Bauausstellung eine Veranstaltung verstanden, die aus tatsächlich und in natürlicher Größe errichteten Bauten besteht. Die Bauten sollen dem Publikum während der Ausstellung zugänglich und ihrer dem Entwurf entsprechenden Bestimmung gemäß eingerichtet und benutzbar sein. Wohnhäuser sind so als Wohnungen möbliert, Läden als Verkaufslöke und Bauernhöfe zeigen die Vorrichtungen für landwirtschaftliche Nutzungen. Die Gesamtheit von Entwurf, Realisierung und Einrichtung ist also wesentliches Element der Bauausstellung, das stets mit der Absicht verbunden ist, für die ausgestellte Bauaufgabe Mustergültige Lösungen zu präsentieren.]

⁴¹³ Ibid. p37

[Bauausstellungen sind Wohn-Ausstellungen. Keine einzige Bauausstellung übergeht das Thema 'Wohnen'.]

world exposition sites. One notable exception to these out-door exhibitions is the 1931 *Deutsche Bauausstellung* in Berlin that also feature the exhibition *Die Wohnung unserer Zeit* [The Dwelling of Our Time] that was curated by Mies van der Rohe and which was set up inside the *Large Exhibition Hall No. 2* of the Berlin exhibition centre [See Figure 37]. The buildings of this exhibition were also, in contrast to most other building exhibitions, only temporary structures although they were built in a 1:1 scale⁴¹⁴.

Side lineages of the building exhibition

The building exhibition has several 'offspring' and related parallel developments that shall only find a brief mentioning here. Firstly, one would have to mention those building exhibitions by volume house builders, and manufacturers of pre-fab houses that are particularly popular and common in Germany. These exhibitions are purely marketing exhibitions that serve an audience that wants to get information on houses they could build on their acquired plot of land. These exhibitions, usually, do not involve any architects and they are certainly not aiming to present architectural innovation that goes beyond the latest technological improvements regarding building materials, plumbing and heating etc. A peculiarity of these exhibitions is that the exhibited buildings are not intended to be transferred into use after the exhibition.

Secondly, in terms of their similar set of 1:1 building ensembles on a defined, and often confined area, one has to mention here open-air museums or so called museum villages. Open-air museums have been first established around the same time as the building exhibition. The first European museum of this kind, the museum *Skansen* near Stockholm that opened already in 1891⁴¹⁵. Yet, open-air museum are distinguished from building exhibitions through their temporal approach. They display built and furnished examples of historical architecture in a similar manner to that of building exhibitions. However, they are not concerned with contemporary or even a future

⁴¹⁴ Other, in parts far more traditional, exhibition parts were an 'International Exhibition on Urban Planning and Housing', the 'Exhibition of the City of Berlin', 'Fine Art and Building Art', 'In the German Village', 'Rural Settlements', or the 'International Garage Exhibition, to name but a few. See here: AUSSTELLUNGS-, MESSE- UND FREMDENVERKEHRSAMT BERLIN (ed.) (1931). *Deutsche Bauausstellung Berlin 1931*. Bauwelt Verlag: Berlin

⁴¹⁵ *Skansen* was initiated and curated by Artur Hazelius who first experimented with the display of vernacular, historical architecture at the Paris Exposition of 1878. For *Skansen*, historic vernacular buildings from all over Sweden were dismantled and re-erected on the museum site thus forming a growing show of national architecture.

architecture thus not guiding towards a future development of architecture⁴¹⁶.

Lastly, and in their impact on the development of architecture closer related to the building exhibitions are those building ensembles or urban/suburban quarters that gained in their exemplary demonstration of a new building style or the amassment of designs by a group of prominent architects a certain status as exhibitions. These ensembles were not originally conceived as exhibitions and individual buildings were usually never publicly accessible. Model and experimental homes, model and demonstration villages, either initiated by private building entrepreneurs, housing associations or city corporations fall here into a similar category⁴¹⁷.

Building exhibitions as sites of architectural development

While the actual 1:1 buildings present the most important part and, with exceptions, the longest lasting legacy of a building exhibition it is crucial to note that building exhibitions are usually accompanied by one or several 'contextual' exhibitions that could follow a more traditional display format such as the presentation of information boards in an institutional exhibition space. Together, the built buildings and these contextual exhibitions, can be concerned with all aspects of architecture and buildings – from materials and constructions, to architectural form and space, to technological inventions or appliances, to interior design and furniture, or to new social agendas regarding the way in which we live. Building exhibitions have also often parts that demonstrate the architectural development in a very particular aspect. Topics included 'Economical Building Methods'⁴¹⁸, 'The Technical City'⁴¹⁹, 'Advertisement with Artificial Light'⁴²⁰ or 'Urban Renewal', 'Ecological Architecture' and 'Energy Saving

⁴¹⁶ The museum villages have also their precursors in the world expositions that showcased, often in ideological opposition to the presentation of progress or rather in order to contrast this progress with a 'manufactured' history, vernacular and pseudo-historical building ensembles. As an early example one can mention here the Paris exhibition of 1878 that showed a complete, 1:1 street scene, the *Rue des Nations*, in which the traditional buildings styles of all participating nations were assembled together. A further example is here Charles Garnier's *Histoire de l'habitation humaine* at the Paris exhibition from 1889. Garnier showed in this exhibition, which was grouped along the Seine, a collection of houses from all different historical periods and geographical regions ranging from the 'Primitive Hut', over the Roman patio house to a Flemish Renaissance townhouse.

⁴¹⁷ These are particularly common from 1925 onwards.

⁴¹⁸ At the 1919 exhibition in Berlin, presented by Hermann Muthesius

⁴¹⁹ At the 1928 exhibition in Dresden

⁴²⁰ At the 1930 exhibition in Stockholm and the 1951 *Constructa* exhibition in Hannover

One reason why building exhibitions had such a lasting influence on the architectural development and feature more prominently than any other exhibition form in the architectural histories is their longevity. The longevity of building exhibitions allowed also for a continuous discourse within architectural history and theory referring to a still existing architecture rather than a long dismantled exhibition of which only secondary material exists. Cramer and Gutschow argue here that, consequently, 'the history of building exhibitions is also a history of 20th century architecture'⁴²² [author's translation].

But building exhibitions are not only an object of architectural history; they can also be regarded as a decisive medium in the development of architecture itself. Lampugnani asserts here 'that exhibitions play a pre-eminent role in the development of architecture'⁴²³. Building exhibitions fall into the third category that he considers to have influenced the architectural development, namely those that 'in which model buildings in the scale of 1:1 have been put up temporarily'⁴²⁴. Their sheer scale made many of those building exhibition key to the development and propagation of progressive, and in a few cases also reactionary, architecture. Two examples for this would be the *Mathildenhöhe* in Darmstadt from that was influential in presenting and promoting the *Jugendstil* in Germany and abroad or the *Weissenhofsiedlung* in Stuttgart from 1927 that led, as Tegethoff writes, to the 'final breakthrough of the modern movement in architecture'⁴²⁵. And Cramer and Gutschow argue similarly when they claim that 'modern architecture was founded at a building exhibition in 1901'⁴²⁶, - namely the already mentioned exhibition *Ein Dokument Deutscher Kunst* at the Mathildenhöhe in Darmstadt.

Yet, Cramer and Gutschow are doubtful whether building exhibitions are and have

⁴²¹ At the 1984/87 IBA in Berlin. See also Case Study 6

⁴²² CRAMER and GUTSCHOW (1984). p7
[*Die Geschichte der Bauausstellungen ist auch eine Geschichte der Architektur des 20. Jahrhunderts.*]

⁴²³ LAMPUGNANI (1981). p30

⁴²⁴ Ibid. p30

⁴²⁵ TEGETHOFF, Wolf (1993). 'Book review: The Weissenhofsiedlung: Experimental Housing Built for the Deutscher Werkbund, Stuttgart, by Karin Kirsch'. In: *The Journal of the Society of Architectural Historians*, Vol. 52, No.2 (June 1993). p242

⁴²⁶ CRAMER and GUTSCHOW (1984). p7

indeed been the 'motor for innovation'. They claim that most building exhibitions have rather gathered innovations and experimental approaches that have been already developed, built and tested or at least published elsewhere and were therefore only a novelty for a lay audience but not for the architectural profession. What they [supposedly] rather did, was amass those ideas and present them in a coherent and condensed manner with a large publicizing apparatus in their support⁴²⁷. While the promotional aspect of building exhibitions is undeniable, the thesis refutes this position by Cramer and Gutschow and maintains that building exhibitions can be and were indeed used as laboratories in which architects, and partly also city councils, housing associations or building contractors, experiment with new architecture and/or buildings and their components⁴²⁸.

But to underline the potential laboratory character of building exhibition one can examine here one of the most prominent examples, the *Weissenhofsiedlung* in Stuttgart, and here Mies van der Rohe's multi-storey apartment block, the *Wohnzeile* [See Figure 38]. One can establish here in which way an architect used the exhibition and the construction of a residential building to experiment in a 1:1 scale. On the one hand, the apartment block constituted Mies' first steel frame building, thus giving him the opportunity to experiment with a construction technology that should, from then on, become of paramount importance for his projects. While the steel frame as such, even in a residential building, was not a new invention and not a new introduction of the *Weissenhof* exhibition, its significance is rather in the way Mies applied the steel frame in order to obtain an almost completely open floor plan that could be adapted according to a future resident's needs. He made this principle of flexibility even more explicit by calling 'on other [architects and designers] to finish these raw spaces with internal partition walls' as Schneider and Till write⁴²⁹. In this respect, Mies experimented not only with a new construction and a new spatial set up for residential living, but most importantly he experimented with a new form of a collaborative production of

⁴²⁷ Ibid. p36

⁴²⁸ The thesis will later deal in Part III, Chapter 8 with one specific building exhibition as a case study, namely the 1987 *International Building Exhibition Berlin*, and prove that building exhibitions can indeed be the 'motor of innovation' as well as develop experimental approaches. The case study will elaborate specifically on the laboratory aspect of this building exhibition in regard of the actual praxis of architecture, the way in which architecture is produced through participation. It will show how, through the exhibition set up, urban regeneration can be executed in a more 'careful' manner, and the experimentation within a so-called life situation provides the framework to produce an architectural laboratory.

⁴²⁹ SCHNEIDER, Tatjana and TILL, Jeremy (2007). *Flexible Housing*. Architectural Press: London. p60

Architects that 'completed' Mies building with their interior designs included Lilly Reich, Franz Schuster, the Swiss *Werkbund* Collective, Adolf Meyer, Rudolf Frank, or Arthur Korn a.o.

architecture. One could liken here his approach to a form of curatorial process that is not dissimilar to Mies' role as curating director for the whole *Weissenhofsiedlung*.

Another example, where Mies van der Rohe used an exhibition as experimental field, would be the already mentioned exhibition *Die Wohnung unserer Zeit* at the 1931 building exhibition in Berlin. Mies acted here as curator, exhibition designer and exhibited also one single storey house (not unlike the *Barcelona Pavilion*) and a studio apartment. What is of interest here is the actual layout of individual model houses in the *Large Exhibition Hall No.2*. If one compares this plan with Mies' later plan for the *IIT Campus* in Chicago one could argue that the Berlin exhibition acted as a precursor, (Peter Smithson would call it 'a real before the real'), in which Mies could test for the first time a quasi urban ordering system that should only come into full fruition with the realized *IIT Campus*⁴³⁰.

Architecture installations – experiments in the public realm

The installation has been already explored as an architectural medium in Chapter 3. This section is concerned with the installations implementation in space, interior or exterior, in order to conduct an architectural experiment. What has previously been indicated is that architects were producing installations long before the term was actually used to describe such structures and events⁴³¹. It is difficult, or near impossible, to ascertain any specific moment in history when installations were used for the first time to experiment with new architectural concepts and ideas. However, one can nevertheless deduct from existing historical representations and accounts that the experimental architecture installation is a trans-historical phenomena. This point is also made by Peter Smithson when he writes that 'architects of the first three generations of the Modern Movement used exhibitions in the same way as the architects of the Renaissance used the masques; to try out in real space, but in impermanent materials, their emergent ideas'⁴³².

Public exhibitions spaces (museums, galleries, salons etc.) did not exist until the late 17th century and it took architecture another good one hundred years to find its way into these emerging places of display [See Chapter 6]. Architects therefore had to find

⁴³⁰ For a comparison of these plans see: CRAMER and GUTSCHOW (1984). p166 and LAMBERT, Phyllis (ed.) (2001). *Mies in America*. CCA: Montreal. pp260-275

⁴³¹ *The Oxford English Dictionary* notes that 'installation' was first used, other than the meaning of installing a person into a position, in 1882.

⁴³² SMITHSON (1997). p183

other spaces and occasions where they could mediate and test their architectural ideas beyond the studio and before the built building. The dramaturgical plays, masques, festivals and later theatre *scena* offered such possibilities and their scale as well as spatial requirements predisposed them for large or 1:1 scale architectural installations. One could hence regard these spaces as the precursors of experimental laboratory spaces for architecture and the relation and exchanges between architecture and stage have since the 16th century been a constant moment in the development of architecture.

As an early example for an interior theatre installation one could take here the still existing *Teatro Olimpico* in Vicenza, designed by Palladio and completed by his pupil Scamozzi in 1585 [See Figure 39]. The principle layout of the theatre with a semi-circular arrangement for the audience and the perspectival *scena* of the stage had been already theoretically developed by architects like Peruzzi or Serlio⁴³³. Similarly, stage sets creating more or less realistic street scenes through staggered replicas of buildings existed at least since the late 15th century. What makes the scenic installation of the *Teatro Olimpico* so remarkable is the use of perspective to a dramatic effect in order to achieve a full-scale enactment of an 'ideal city space'. The theatre installation is here used to experiment with an idea of 'ordering' the city by means of perspectival axis, something that should only be achieved several years later with, for example, the conception and consequent construction of the *Piazza del Popolo* and its *Tridente* in Rome under Pope Sixtus V, starting in 1589 [See Figure 40]. The appropriation of the perspectival effect in Palladio and Scamozzi's street scenes, with the raising of the floor plane, shortening of the interregnum, and the downsizing of the flanking facades can also be found in Borromini's colonnade in the *Palazzo Spada*, or in Bernini's *Scala Regia* in the Vatican⁴³⁴.

As a 20th century example one could take Lyubov' Popova's 'acting apparatus' for *The Magnanimous Cuckold*, produced by Vsevolod Meierkhol'd in Moscow in 1922 [See Figure 41]. The Constructivists used the theatre as one means for the development from surface to space. And although they were ultimately in favour of the dissolution of the traditional theatre in order to get art and culture out into the streets, the Constructivists nevertheless used the theatre in order to 'hasten this demise [...] or use

⁴³³ See for instance Sebastiano Serlio's *Tutte l'opere d'architettura et prospetiva*, published in 1545

⁴³⁴ Lewis Mumford notes here that 'The new Baroque spatial perspective first manifested itself, not in the actual city, but in a painted street scene in the theatre (Serlio); and it was not an accident that the new city planners, like Servandoni, Inigo Jones, and Bernini were likewise scenic designers'. MUMFORD (1961). p378

it as a laboratory'⁴³⁵.

Only one year before *The Magnanimous Cuckold*, in 1921, the Russian Constructivists had presented their 'laboratory work' in the third OBMOKU⁴³⁶ exhibition in Moscow. Apart from wall-based paintings, the Constructivist's gallery of the exhibition was filled with three-dimensional constructions, including works by Tatlin, Stenberg, Rodchenko, Ioganson, and Medunetskii. While these, 'non-utilitarian' constructions already pointed toward Constructivist's ideas of large-scale, utilitarian buildings they remained in scale still closer related to the Constructivist paintings on the gallery wall⁴³⁷ [See Figure 42].

The transition in scale was then achieved through Popova's (and others') installations or apparatuses on the theatre stage. Popova's timber stud apparatus for the *Magnanimous Cuckold* can be seen, on the one hand, as an expansion towards architecture of Rodchenko's or Stenberg's constructions as presented in the OBMOKU exhibition. On the other hand, this complex assemblage of elementary architectural elements – the timber-frame facade, the two stairs, openings, platforms, as well as symbolised machinery (the windmill and the two wheels) and the use of large-scale typography – anticipates and tests a new architectural expression of a new society that would almost immediately find its application in buildings such as the (also temporal) *Izvestiya* pavilion by Niva, Gladkov and Kester at the 1923 *All Union Agricultural Exhibition* in Moscow⁴³⁸.

Popova's apparatus is also significant regarding the installation's principle of being 'installed in space'. The whole stage and backstage area was left completely bare, stripped of all usual requisites like curtain, backdrops or portals. Nothing that could provide the illusion of being something else than it was – a brick wall was a brick wall, an electrical was cable an electrical cable. It was thus not only Popova's stage apparatus that manifested the three principles of Constructivism as theorized by

⁴³⁵ LAW, Alma H. (1981). 'A Conversation with Vladimir Stenberg', in: *Art Journal*, Vol. 41, No. 3, The Russian Avant-Garde. (Autumn, 1981). p233

⁴³⁶ Society of Young Artists

⁴³⁷ El Lissitzky pointed out the significance of the exhibition installation that let the viewer become intermediary between the constructions that were positioned throughout the whole gallery. He writes: 'We looked not only at the works of art hanging on the walls, but particularly at those that filled the space of the hall'. Quoted in: GOUGH (1998). p92

⁴³⁸ The change in political and consequently political climate in Russia after 1924/5 prevented the further development and implementation of Constructivist ideal on a larger scale. For further reading on Russian Constructivism see: LODDER (1983) and LODDER, Christina (2005). *Constructive Strands in Russian Art 1914-1937*. Pindar Press: London

Aleksei Gan, namely 'Tectonic', 'Faktura', and 'Construction'⁴³⁹, but also the whole stage and backstage area. This set up can further be read as an attempt to exemplify a clean slate, a doing away with the old falsehoods, and to literally provide a new 'stage' for a new world.

It is obvious, that this form of traditional theatre space where the audience or the viewer is separated from Palladio and Scamozzi's *scena* or Popova's constructions, contradicts the initially postulated principle of the 'immersion of the viewer' in the installation⁴⁴⁰. The form of theatre does here not allow for the viewer to be physically immersed in the installation itself. However the theatre installation, in conjunction with the narrative of the play, the manipulation of light, music, sound and special effects, still operates 'fully within the realm of sensory perception'. It is, as Kamph writes, "installing' the viewer into an artificial system with an appeal to his subjective perception as its ultimate goal"⁴⁴¹. Additionally, one could argue that the role of the actor within the installation is already taken by the professional performer. This argument is supported by Bowlt who writes that it was the influential theatre producer Vsevolod Meierkhold who 'provided artists with the opportunity to use the stage as a space for the integration of actor and set, i.e. to regard the theatre as the extension of the actor (a three-dimensional, kinetic form) [...]'⁴⁴².

Both examples of theatre based architectural installations, Palladio's and Scamozzi's *Teatro Olimpico* and Popova's stage apparatus for *The Magnanimous Cuckold*, stand here exemplarily for a long tradition of exchanges between both disciplines⁴⁴³. Besides

⁴³⁹ See LODDER (1983). p99 or GOUGH (1998). pp96-97

⁴⁴⁰ This opposition of stage and audience is partly dissolved in stage and theatre designs that follow those of the Constructivists. One has to mention here Frederick Kiesler 'Space Stage' presented 1924 at the 'International Exhibition of New Theatre Equipment', 1924 in Vienna which placed the stage with a concentric ramp in the middle of the auditorium. Yet this stage installation also didn't manage to actually incorporate the audience.

⁴⁴¹ KAMPH, Stefan (2004). 'Installation' from: *Theories of Media – Keywords Glossary*. University of Chicago, 2004. Source: <http://csmt.uchicago.edu/glossary2004/installation.htm> [Last accessed: 18.06.2008]

⁴⁴² BOWLT, John E. (1977). 'Constructivism and Russian Stage Design' in: *Performing Arts Journal*, Vol. 1, No.3 (Winter, 1977). pp63-64

⁴⁴³ It is a tradition that still continues. More recently, architects like Zaha Hadid use stage design to experiment with architectural ideas and develop their architecture language before the realisation of larger-scale building (*Pet Shop Boys*, World Tour, 1999/2000; *Desire*, Steierischer Herbst Graz, 2003; *Metapolis II*, New York, 2007); Co-op Himmelblau designed the stage set for *Der Weltbaumeister* in Graz in 1993.

In parallel to this relation between theatre stage and architecture one can also witness the influence of theatre installations onto the art world. Olafur Eliasson's 2003 *Weather Project*, the orange glowing sun in the Tate Modern turbine hall is here just one example of application of

these interior architectural installations for the theatre, installations for outdoor spectacles are of similar significance for experimentation with architecture. As the stage designs for the theatre, these installations in the public realm offered architects, since the early 16th century, opportunities for 'trying out large-scale effects [and make] experiments for large monumental art'⁴⁴⁴. Architects, and other artists, have since then used both strands of theatrical display, interior and exterior, to present, promote and test new architecture.

It is probably not surprising that it is precisely in times of social and political revolutions, France 1789 – 1795, Russia 1917–1924, that architects have favoured the street and the public square both as the topics and loci for their architectural interventions. It is here where one could mediate and test ideas to and with larger masses of people and put ideas into an immediate social and spatial context. The installation in the public square further allows for the instantaneous and direct 'immersion of the audience' into the work itself, a fact that was used – and misused – in large-scale political spectacles. One such example would be Popova's and Aleksander Vesnin's *Project for a theatricised military parade for the Congress of the Third International, entitled 'The End of Capital'* from 1921 [See Figure 43]. Popova writes about this, never executed, installation and its spectacle: '[A] cast of thousands, soldiers, planes, trains, tanks, gymnasts and military bands, never assembled to move from the enclosed and forbidding city *Fortress of Capital* on the left of the square to the open, skeletal structure of the *City of the Future* on the right'⁴⁴⁵. The *City of the Future* is of course a Constructivist city and resembles both Popova's and Vesnin's theatre designs⁴⁴⁶.

Without the same officially sanctioned political agenda, but nevertheless politically progressive ambitions, are numerous architectural installations in the public space that occurred in the 1960s and early 1970s. Architects were intrigued by the notions of perception, performance and experience, realising (falsely or not) that architecture in the age of high-technology and space travel had no longer to be concerned with providing the more or less refined shelter for our physical survival. The focus had shifted to the social activity within this "hardware" and one of such social activities was

stage designs by innovative theatre directors such as Robert Wilson into 'theatrical' installation art.

⁴⁴⁴ BURCKHARDT (1962). p267

⁴⁴⁵ LODDER (1983). p51

⁴⁴⁶ A resemblance exists in particular with Vesnin's design for Chesterton's *The Man who was Thursday* at the *Kamernyi Theatre* in Moscow, 1923

the notion of 'play'. The interest in a new understanding of play and games goes back to the Situationists and had been theoretically prepared by Jacques Fillon and Guy Debord as early as 1954. In their manifesto *New Games!* they conclude with saying that '[the] valorisation of leisure is not [...] a mere pleasantry. We remind you that this means inventing new games'⁴⁴⁷. For the Situationist⁴⁴⁸ the notion of play was fundamentally linked with the experimentation of alternative ways in which a city and architecture would be perceived. It is precisely these both aspects – perception and play – that are taken up by architects some ten years later and experimented with through installations in the public realm. These are now installations that actively engage the audience. They transform the viewer into a participant, ultimately into a producer of the work.

Exemplary for this approach is the architectural scene in Vienna in the 1960s and early 1970s where architects like Günther Feuerstein, Hans Hollein, and in particular groups such as Zünd-Up, Haus-Rucker-Co and Coop Himmelblau created an 'Austrian Phenomenon' as Peter Cook called it already in 1970⁴⁴⁹. Vienna, besides Graz, provided then the exceptionally experimental field or environment in which these architects tested and expanded the boundaries of architecture through installations, happenings and performance pieces that combined both play and perception. Haus-Rucker-Co, for instance, created *Gehschule* (school of walking) in 1971 that transformed a stretch of pavement and invited passers-by to playfully experience 'walking', Co-op Himmelblau created in 1970 a *Soft Space* with 12000 cubic meters of foam in a Viennese street [See Figure 44].

It can be argued that we can see today a resumption of the approaches to installations and forms of spectacles produced by both the Russian Constructivists and the Viennese architects of the late 1960s. However, it is crucial to make a clear distinction here. On the one hand we witness the emergence of young architecture groups in search of alternate forms of architectural production, aiming for a re-appropriation of architecture as a critical means or medium that is able to challenge the dominance of

⁴⁴⁷ DEBORD, Guy and FILLON, Jacques (1954). 'New Games!' in: *Potlatch*, No. 14, 30 November 1954. Reprint in CONRADS, Ulrich (ed.) (1975). *Programs and Manifestoes on 20th Century Architecture*. MIT Press: Cambridge, Mass.

⁴⁴⁸ Debord and Fillon wrote this manifesto prior to the *Internationale Situationist*. However, the same interest in play is expressed later in the text 'Contribution to a Situationist Definition of Play', (uncredited), *Internationale Situationniste*, No.1 (June 1958)

⁴⁴⁹ COOK, Peter (1970) *Experimental Architecture*. Universe Books: New York
See here also: 'The Austrian Phenomenon – Konzeptionen Experimente Wien Graz 1958-1973', *Hintergrund* No.23. (March, 2004). Architekturzentrum Wien: Vienna

commercialisation and commodification of the urban realm. Installations, often produced in a cross-disciplinary co-operation with artists, performers, natural or social scientists, are one major form within this work. On the other hand we see exactly these forces or institutions of commercialisation and commodification utilising the same forms and techniques to their advantages. While these installations also include the viewer as active participant, the participation is merely a disguise for a role as, ultimately, passive consumer. In order to avoid this trap and the submergence into a hegemonic culture of commodification, the challenge for any progressive and critical architectural praxis is therefore to continuously develop the installation as a laboratory in which one can experiment with new forms of architecture and the way it is produced.



Figure 32: Exhibition of building material and the technologies to appropriate them for construction at the Great Exhibition of Works of Industry of all Nations, London, 1851.



Figure 33: Part of the exhibition Histoire de la Habitation Humaine by Charles Garnier at the 1889 Exposition Universelle in Paris.

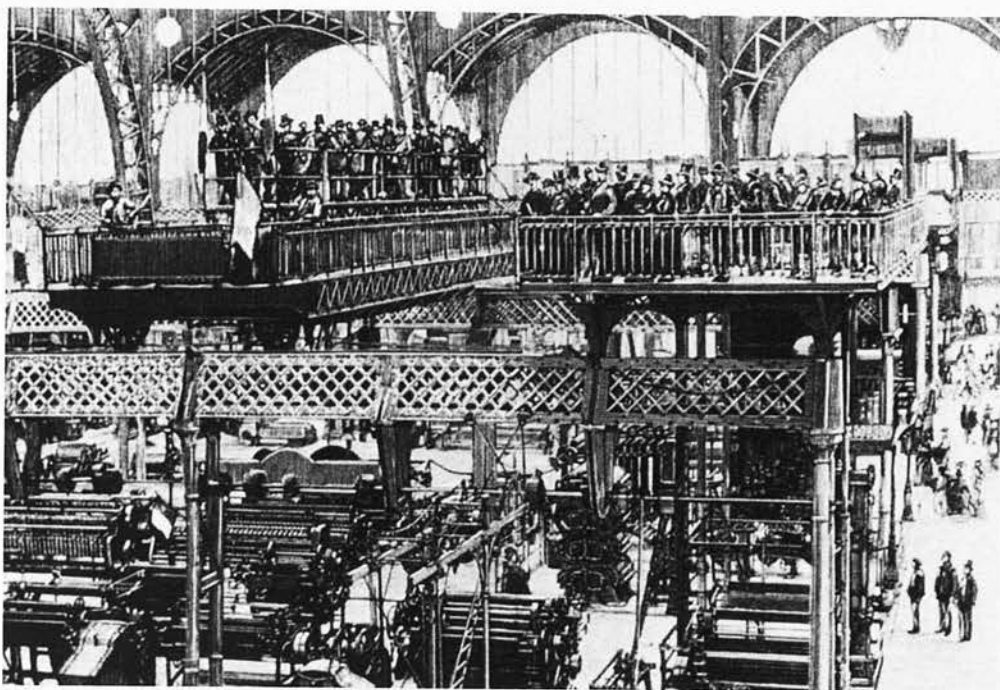


Figure 34: Movabel viewing platforms in the Galerie des Machines at the Exposition Universelle 1889 in Paris.



Figure 35: Model Houses for Four Families designed by the architect and housing reformer Henry Roberts for the 1851 Great Exhibition in London.

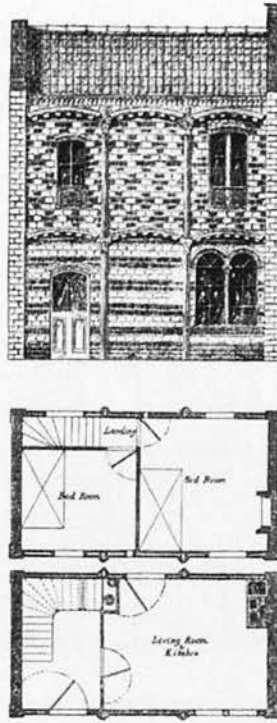


Figure 36: Elevation and Plan of a Model House for low-income labourers designed by M.S. Ferrand and shown at the Exposition Universelle 1867 in Paris. The focus in this house is particularly on the presentation of a new construction technique combining a cast iron structure with brickwork.

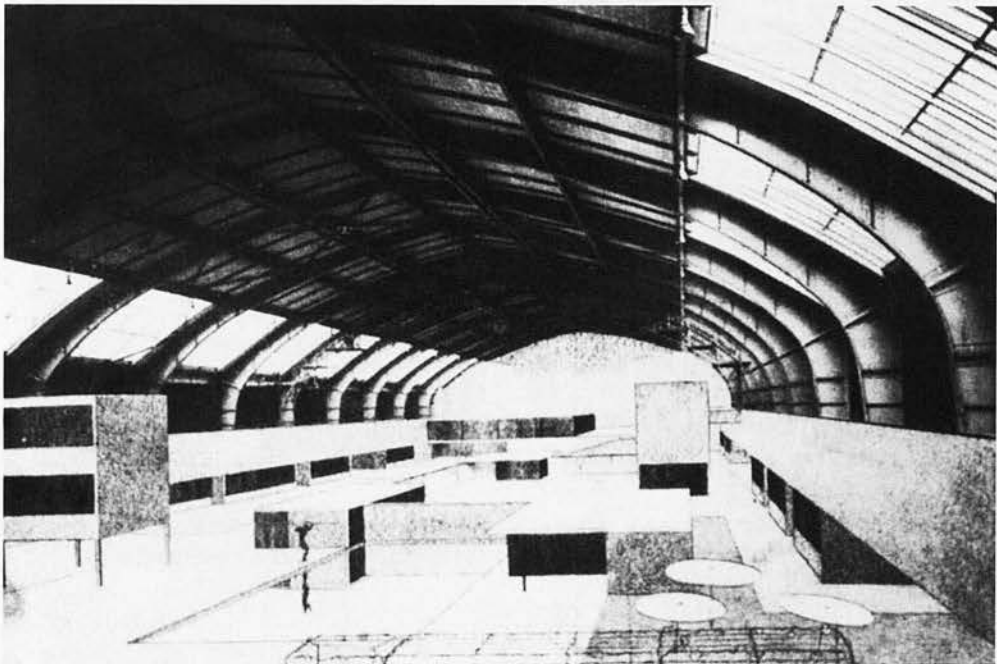


Figure 37: Photomontage by Ludwig Mies van der Rohe for the 1931 exhibition Die Wohnung unserer Zeit at the Deutsche Bauausstellung in Berlin. Although indoors, all exhibited buildings were built in real-scale.

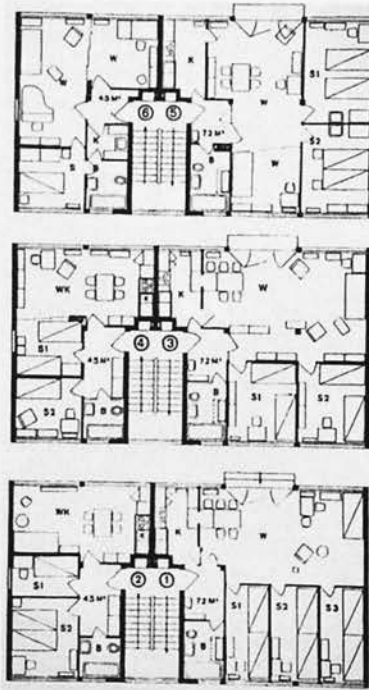


Figure 38: Floorplans of the Wohnzeile by Ludwig Mies van der Rohe at the Weißenhof Siedlung in Stuttgart, 1927. The various plans show the different interpretation of open structure provided by Mies' design through different architects and interior designers.

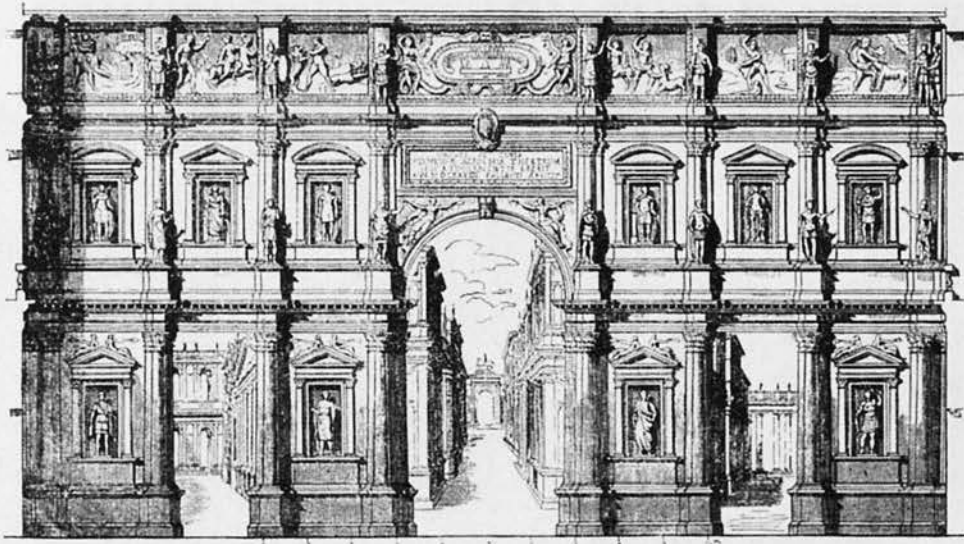


Figure 39: Andrea Palladio and Vincenzo Scamozzi, Teatro Olimpico in Vicenza, completed 1585. View of the stage set with its three axial street scenes.

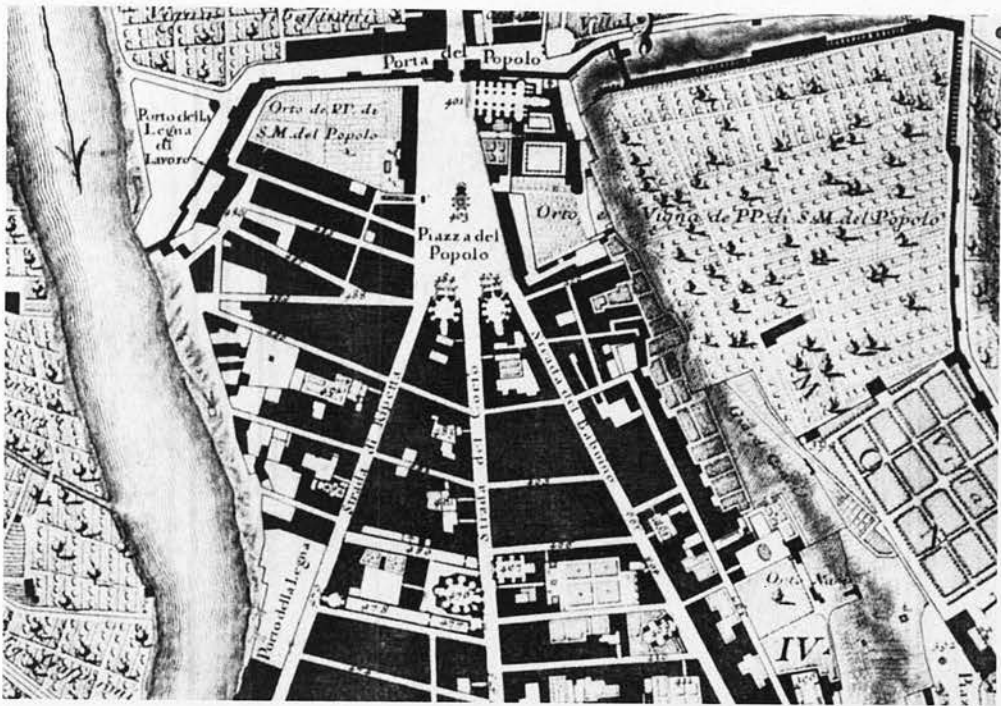


Figure 40: Piazza del Popolo and its Tridente in Rome. Exemplar for a perspectival urban design as prepared through earlier stage sets. (Detail of Nolli Plan, 1748).



Figure 41: Lyubov' Popova's 'acting apparatus' for The Magnanimous Cuckold, produced by Vsevolod Meierkhol'd in Moscow in 1922.

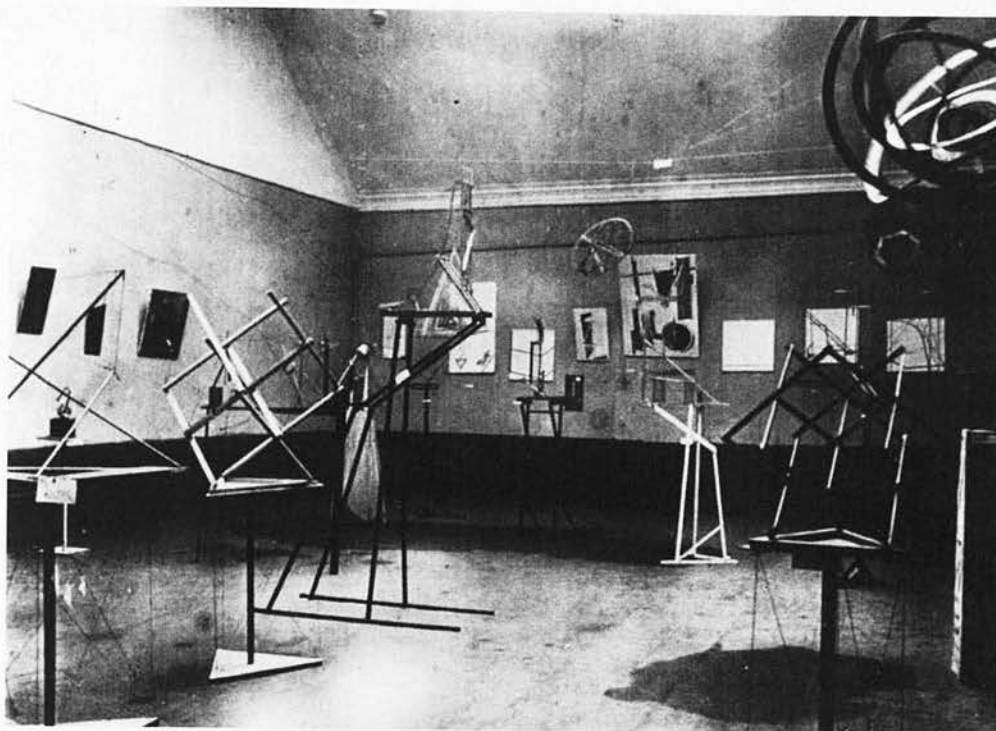


Figure 42: Constructivists' Room at the OBMOKU exhibition in Moscow, 1921, including works by Tatlin, Stenberg, Rodchenko, Ioganson, and Medunetskii.

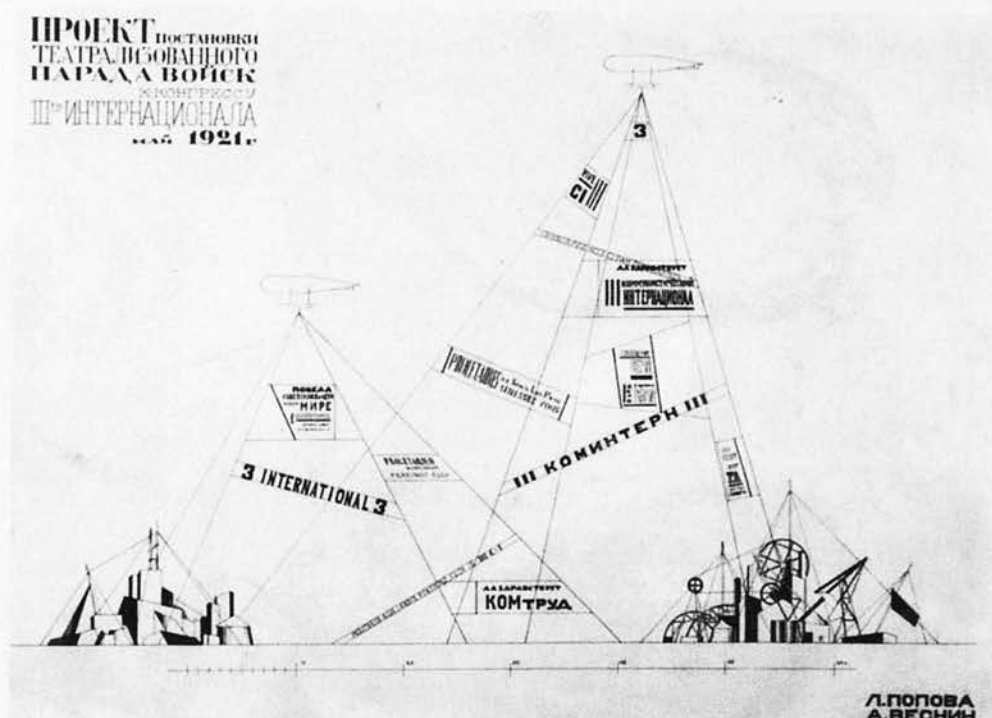


Figure 43: Lyubov' Popova's and Aleksander Vesnin's Project for a theatricised military parade for the Congress of the Third International, entitled 'The End of Capital', 1921.



Figure 44: Coop Himmelblau, Soft Space, Vienna, 1970.

PART III – Examples of Contemporary EXHIBITION Praxis

The previous two parts of the thesis have so far looked particularly at the theoretical implications of the Laboratory Exhibition as well as its historical development. PART I explored the acting subjects, the actual object and media of the exhibition, as well as the very action of exhibiting. All three aspects were explored in their historical development, generating and supporting a theoretical basis for the Laboratory Exhibition. PART II then considered the historically emerging forms and locale of the Laboratory Exhibition, grouping them again into places of production, curated exhibitions, and laboratories in 'real scale'. This part also exemplified how the theoretical preconditions explored in PART I have been relevant in the historical developments towards the Laboratory Exhibition.

In PART III the concept of the Laboratory Exhibition is finally explored through five examples of a contemporary exhibition praxis. It investigates how this praxis is related to both the theoretical basis formulated in PART I as well as to the three investigated historical forms and locale of the Laboratory Exhibition as established in PART II. To conclude, the thesis will also present in Chapter 13 a number of speculations and recommendation regarding the future of the Laboratory Exhibition that should make this praxis relevant for a wider professional and academic audience.

Before dealing with the actual case studies in Chapter 8 to 12, this short introduction to PART III first of all makes the case for the inclusion of praxis examples into the thesis before presenting briefly the five selected case studies. It will then reflect on the criteria behind their selection before explaining the rationale and structure of their analysis.

It has been already stated in the PROLOGUE that this thesis took a very personal starting point, aiming to inform the author's own exhibition praxis and to put this praxis into a general context or framework that makes this personal praxis relevant for a wider academic and professional audience. As examples of this praxis, that are put into the established theoretical and historical context, the author has selected five exhibitions that have either been part of the author's own praxis or have been instrumental in developing this praxis. Rather than examining examples by other producers or Laboratory Exhibitions that would have been mere objects of investigation, the author chose to use exhibitions to which he had a unique insight in terms of their conception, production and execution.

Five examples of a contemporary Laboratory Exhibition praxis

The five examples of Laboratory Exhibitions are, in chronological order as well as in the order as they are presented here in PART III: *Internationale Bauausstellung Berlin 1987, Sektion Behutsame Stadterneuerung*, short IBA-Alt⁴⁵⁰, Berlin, 1984-1987; *Architectural – Zwischen Architektur und Photographie*, Otto Steidle und Verena von Gagern⁴⁵¹, Munich, 1993/94; *Traumhaus 2000 – Agentur für Wohnwünsche*, Architekturklasse Akademie der Bildenden Künste München⁴⁵², Munich, 2000; *Less Aesthetics, More Ethics*, 7th Architecture Biennale, Venice, 2000; and *Urban Cabaret*, G.L.A.S., Glasgow, 2001. The next paragraphs aim to shortly introduce these five case studies before they are examined in detail in the following chapters.

The Internationale Bauausstellung Berlin was divided into two sections, 'Careful Urban Regeneration' and 'Critical Urban Repair'. The former meant the renewal of existing city fabric and built structures and the latter dealt with a critical repair of the (historic) city fabric through newly built structures. The main exhibition aim was to demonstrate a new understanding of urban planning, reconstruction and regeneration that would favour point intervention rather than large-scale masterplans. In regard of the *IBA-Old*, curated by Hardt-Walter Hämer, this included the development and demonstration of participatory planning and renovation processes. The exhibition further attempted to save a particular district of Berlin, Kreuzberg, that had been one of the most deprived areas in West-Berlin in the early 1980s. As an exhibition or, more specific, a building exhibition the IBA presented rather a continual process that went over several years, concentrating on an interim 'report year', 1984, and a final exhibition year in 1987.

Architectural – Zwischen Architektur und Photographie, Otto Steidle und Verena von Gagern was the first of a series of exhibitions that started in 1993 that were curated by the author in collaboration with the Munich based architect Otto Steidle. The exhibition in the *Architekturgalerie* in Munich presented work of Steidle through the photography of his wife Verena von Gagern. Yet, as Dorothea Parker wrote in the *Bauwelt*, these

⁴⁵⁰ *International Building Exhibition Berlin 1987, Section Careful Urban Regeneration*, short IBA-Old.

The term '*Behutsame Stadterneuerung*' is translated in the English literature either as 'Careful Urban Regeneration' or 'Cautious Urban Renewal' (usually US publications). The former is used here unless quoted from a specific source.

⁴⁵¹ *Architectural – Between Architecture and Photography*, Otto Steidle and Verena von Gagern, Munich, 1993

⁴⁵² *Dreamhome 2000 – Agency for Living Desires*, Postgraduate Architecture Course at the Academy of Fine Arts Munich

photographs were 'at the same time the actual exhibition objects'⁴⁵³. *Architectural* was 'an encounter between two creative, independent visual languages [in which] the pictorial result, the artistic reply to the other, necessarily has a critical quality for both'⁴⁵⁴. The exhibition thus created a critical mirror function through which the architect Otto Steidle was able to clarify and verify his own architectural ideas.

Traumhaus 2000 – Agentur für Wohnwünsche, curated by the author and executed by students of the post-graduate course in architecture and urbanism of the Academy of Fine Art, aimed to document a wide-ranging exploration about the contemporary dreams that exist regarding our forms of dwelling. Primarily, the exhibition was concerned with a concrete presentation of dwelling/living spaces and objects. Interviews and questionnaires helped to determine and visualize the visitors' aspirations and dreams regarding the notion of the 'home'. Besides the regular or accidental passers-by specific groups (primary and secondary schools, university students etc) were invited over one or several afternoons into the agency space to work with the *Architekturklasse* on the topic. All gathered information and results of the investigation became part of a growing and processual exhibition that had no predictable result.

Less Aesthetics, More Ethics, the 7th Architecture Biennale in Venice, curated by the Italian Architect Massimiliano Fuksas, asked of the participants as well as the audience how one should approach the megalopolis of the 21st Century given the social, economic and environmental problems that we are facing at the beginning of the new Millennium. As such, '*Less Aesthetics, More Ethics*' was a proclamation that inherently went beyond the usual intra-disciplinary discourse of architecture as well as beyond the usual media spectacle of a mega event like the Venice Biennale. *Less Aesthetics, More Ethics* was coined as a 'Biennale of research, interrogation and critique of the traditional parameters that are used by architecture and urban planning'⁴⁵⁵. Its main exhibition event, with the physical exhibition in the *Giardini* and the *Arsenale*, ran from June to October 2006. Yet this was preceded by important preparatory stages that

⁴⁵³ PARKER, Dorothea (1993). 'Architectural' in: *Bauwelt*, Heft 46, 1993. p2465
[Die Münchner Architekturgalerie stellt zur Zeit Fotos aus, die das Werk eines Architekten zeigen und dabei selbst Ausstellungsgegenstand sind ...]

⁴⁵⁴ VON GAGERN, Verena (1993). 'Between Architecture and Photography' in: STEIDLE, Otto and VON GAGERN, Verena (1993) *Architectural*. Nazraeli Press: Munich. p9

⁴⁵⁵ CAGOL, Stefano (2006) 'Settima Mostra Internazionale di Architettura – Less Aesthetics, More Ethics', in: BRUSETTO, Giorgio (ed.) (2006). *Un secolo di architettura alla Biennale e in Europa*. Marsilio: Venice. p64
[Massimiliano Fuksas, spostando il dibattito sulle megalopoli, presenta una Biennale di ricerca, interrogazione e critica dei parametri tradizionali utilizzati dall'architettura e dall'urbanistica]

included *Città: Third Millennium, International Competition of Ideas* and *Expo On-Line* as web-based forums through which the discussion about the exhibition topic was furthered and as well as actual content generated.

Urban Cabaret by the Glasgow based cooperative G.L.A.S.⁴⁵⁶ was, in 2001, a series of set events, ranging from mobile and travelling exhibition displays and projections throughout the city of Glasgow to workshops and discussions with groups then involved in struggles to protect or transform their environments. Its aims were to highlight spatial inequality and injustice, champion social struggles centred around buildings and the environment, and highlight ideas which promote a rethinking of how one could make buildings and cities in more cooperative ways for the benefit of all who use them. *Urban Cabaret* encouraged individuals and groups to engage with GLAS' activities and help to establish new networks within Glasgow, Scotland and further a field around Europe to share good practice and work together to transform our everyday environments.

The selection of the case studies

One overriding interest of this thesis lies within two specific functions of the architecture exhibition, namely the advancement of architecture as an intellectual and artistic discipline and its contribution to a progressive development of contemporary architecture. All five examples are considered to fulfil these functions in their own way, thus exemplifying the variety that such praxis entails. Yet one could still ask why these exhibition examples have been chosen over other exhibitions.

The selection of these five specific exhibition examples firstly relates to the question already posed in the PROLOGUE: *Why had I been doing architecture exhibitions over the past ten years?* The selection criterion followed here the previously stated aim to reflect upon the author's own praxis and to put this praxis into a wider theoretical, historical and practical context. The selected five exhibitions have all been part of the author's own praxis or have been instrumental in developing this praxis. The author's involvement ranges here from attentive visitor, to exhibiting participant, to exhibition designer and to exhibition curator. In some instances the author's role has combined, similarly to the already made argument of a cross- or multi-disciplinary praxis, several of these roles at once.

⁴⁵⁶ Glasgow Letters on Architecture and Space Ltd.

However, besides this personal or subjective selection criterion, the five examples have also been selected according to their diversity in regard of scale, form, place, and agents involved. The diverse range of the case studies is deliberate in order to examine their structural and ideological principles rather than any formal consistencies. The thesis makes here the assumption that the principles, which refer to the definition of the Laboratory Exhibition apply to a mega-event like the Venice Architecture Biennale as well as to a small-scale gallery exhibition like *Traumhaus 2000*; to touring exhibitions in an institutional environment like *Architectural* as well as to process-led, community-based exhibitions like *Urban Cabaret*.

The selected exhibition examples can also be described as both critical and paradigmatic cases of Laboratory Exhibitions. They are critical cases in regard of their strategic importance for the author's own practice. And they are paradigmatic cases in their nature as exemplary and prototypical Laboratory Exhibitions⁴⁵⁷. In that respect the examples or cases can be used to illustrate and test the hypothesis of the Laboratory Exhibition as it has been developed in the preceding two parts of the thesis. The thesis follows here the point made by Bent Flyvbjerg that a case study can just as well be used to test a hypothesis as it can be used to generate such a hypothesis, the latter being the more common view on case studies⁴⁵⁸.

Analysis of case studies

The analysis of the case studies further builds on the structure of this thesis itself in which we have first defined the subject, then defined the object, and finally defined the process. This creates a logical sequence of questions from 'who?' to 'what?' to 'how?' that is applied to the investigation of the individual Laboratory Exhibition examples.

Chapter 1 and the introduction presented already the main aims and objectives of this thesis. Key among these were the aims to a) dissect the various means and elements that constitute the Laboratory Exhibition, including the subjects, objects and processes involved in this praxis, and b) to suggest that this specific form of architectural exhibition is an indispensable part of the architectural praxis in which and through which the architecture can be progressively transformed

⁴⁵⁷ For further reading on the distinction of various forms of case studies see: FLYVBJERG, Bent (2006). 'Five Misunderstandings About Case Study Research', in: *Qualitative Inquiry*, Volume 12, Number 2, April 2006, Sage Publications

⁴⁵⁸ Ibid.

In order to explore the thesis' objectives as outlined above, a set of three sub-questions had been established, each of which is addressed in one of the three parts of the thesis⁴⁵⁹. The question that relates to PART III and under which the five examples are predominantly explored has been the following research sub-question: *How, and to what end, can an experimental framework be produced and deployed in today's praxis of the Laboratory Exhibition?* This question guides the examinations of each individual exhibition example in Chapter 8 – 12. It also investigates how the Laboratory Exhibition praxis is related to the theoretical basis formulated in PART I and PART II

Crucial to the analysis of the selected case studies is the preliminary definition of the Laboratory Exhibition as presented in Chapter 1. This definition shall be briefly recapitulated here:

- The Laboratory Exhibition provides a testing ground in which architectural research is conducted.
- The Laboratory Exhibition is concerned with the investigation, development and experimentation of hitherto unimagined, un-tested, un-established architectural propositions.
- The Laboratory Exhibition acknowledges and deliberately incorporates elements of uncertainty and risk regarding its implementation, perception and result.
- The Laboratory Exhibition deals with architecture in its widest sense, encompassing a material reality, an intellectual construct, and/or a societal process.
- The Laboratory Exhibition is a continuation and integral part of the architectural praxis and is predominantly driven and generated by architects.

In a first step, a set of subordinate questions has been deduced from this definition and its individual attributes in order to analyze each exhibition example.

Firstly, each case study is examined regarding the actual subjects of the exhibition. The questions are here: Who is/are the primary producer/s of the Laboratory Exhibition, including architects, curators, exhibition designer? Who are the secondary producers? The question here concerns in particular the audience and their role within the exhibition or for the production of the exhibition.

Secondly, each case study is examined regarding the actual object of the exhibition.

⁴⁵⁹ See Chapter 1, Introduction, Section 'Research questions and thesis structure', p13

The questions are here: What is the actual exhibition topic and what is the nature of the emerging architecture that is tested or experimented with in the exhibition? What is the architectural research that is conducted through the exhibition? This relates also to the exhibition's presentation of architecture as a) material reality; b) intellectual construct; c) societal process (or a combination thereof).

Thirdly, each case study is examined regarding the process or action and the form of the exhibition. The questions are here: How is the exhibition 'set-up' in order to provide the testing ground for the architectural research/experiment? How does it investigate, develop, and experiment its subject-matter/topic? How are various media used in order to materialize, test and mediate architectural propositions? Specifically related to the definition of the Laboratory Exhibition are here also the questions: How does the exhibition use its temporality as well as its spatial and economic parameters in order to achieve its ends? How do 'elements of uncertainty' or 'risk', incorporated into the exhibition, affect the implementation, perception and result of the exhibition? How does the exhibition form an integral and critical part of the architectural praxis?

In a second step, all case studies are then examined in relation to the research sub-question that had already been the guiding question of PART II of this thesis: *What are the historical momenta in the evolution of the Laboratory Exhibition that a contemporary exhibition praxis can refer to or draw on?* This relates the investigated contemporary praxis to the three different historical types of the Laboratory Exhibition – the 'Place of Architectural Production', the 'Curated Laboratory', and the 'Laboratory in Real-Scale' – each with their different forms and locale as they have been established in PART II.

The case studies are here examined under the following questions: How does the exhibition fit into the typological categorisation of Laboratory Exhibitions as explored in PART II? How do historical precedents such as the described studiolo, Kunstkammer, cabinet de curiosité, museum, academy, studio, world exposition, building exhibition, pavilion, or installation, or elements thereof, relate to this specific exhibition?

CHAPTER 8 – IBA 1987 - Transforming the City through an Exhibition

'Here in Kreuzberg, in a built-up area, we had eight years to learn how to principally organize a democratic planning process'.

Hardt-Walther Hämer in an interview with Felix Zwoch⁴⁶⁰

'The city of clearly comprehensible experiments, ... it is in that sense that both parts of the International Building Exhibition – urban renewal and urban reconstruction - ... have tried to understand Berlin and to re-establish the traditional inner city areas as places for living'.

Joseph Paul Kleihues⁴⁶¹

Exhibition data:

Exhibition Title:	<i>Internationale Bauausstellung Berlin 1987 – Sektion Behutsame Stadterneuerung</i> (International Building Exhibition Berlin 1987 – Section 'Careful Urban Regeneration') or <i>IBA-Alt</i> (IBA-Old) ⁴⁶²
Architect(s):	ca. 70 architectural practices plus community and self-help groups ⁴⁶³
Curator:	Hardt-Walther Hämer, director for <i>IBA – Sektion Behutsame Stadterneuerung</i>
Exhibition Designer:	n/a
Others involved:	staff of ca 70 (architects, scientists, social worker, admin, etc)
Exhibition Date (s):	1981(start of preparations) 1984 – 1987 (exhibition), 1984 (report year) + 1987 (final exhibition year)
Exhibition Venue(s):	various 'demonstration areas' in the district of Berlin-Kreuzberg
Venue Type:	urban realm, buildings, building sites

⁴⁶⁰ ZWOCH, Felix (1987) "'Denken ist etwas, das auf Schwierigkeiten folgt und dem Handeln vorausgeht'" – Hardt-Walther Hämer im Gespräch mit Felix Zwoch' in: KLEIHUES, Josef Paul (ed.) (1987). *750 Jahre Architektur und Städtebau in Berlin*. Verlag Gerd Hatje: Berlin. p249 [In Kreuzberg, in einem bebauten Gebiet, haben wir acht Jahre Zeit gehabt, zu lernen, wie man einen demokratischen Planungsprozess grundsätzlich organisieren kann.]

⁴⁶¹ KLEIHUES, Josef Paul (ed.) (1987). *750 Jahre Architektur und Städtebau in Berlin*. Verlag Gerd Hatje: Berlin. p7 [Stadt der überschaubaren Experimente ... in diesem Sinn haben beide Bereiche der Internationalen Bauausstellung, Stadterneuerung und Stadtneubau, mit je verschieden gewichteten, sich aber überschneidenden Akzenten versucht, Berlin zu verstehen und die traditionellen Innenstadtbezirke als Wohnorte wiederherzustellen.]

⁴⁶² The term '*Behutsame Stadterneuerung*' is translated in the English literature either as 'Careful Urban Regeneration' or 'Cautious Urban Renewal' (usually US publications). The former has been used in this text unless quoted from a specific source.

The IBA section '*Behutsame Stadterneuerung*' was often simply called *IBA-Alt* (IBA-Old) referring to its dealing with existing, old building fabric, while the IBA section '*Kritische Stadtreparatur*' was called *IBA-Neu* (IBA-New) referring to the almost exclusively new buildings that were built for this section. In the following passages IBA-Old is here used synonymously with *IBA-Behutsame Stadterneuerung*.

⁴⁶³ Only Section '*Behutsame Stadterneuerung*'

Exhibition Sub-type: Laboratory in Real-Scale; Place of Architectural Production;
Curated Laboratory

Main Source Material:

Interview: Felix Zwoch – Hämer; printed in: KLEIHUES, Josef-Paul (ed).
(1987). *750 Jahre Architektur und Städtebau in Berlin*. Verlag
Gerd Hatje: Stuttgart

Andreas Molitor - Hämer; printed in: *Brandeins* 09/06

Press Text: not available

Catalogue: SENATOR FÜR BAU- UND WOHNUNGSWESEN (ed) (1984).
*Leitfaden. Projekte Daten Geschichte -Zur Internationalen
Bauausstellung Berlin 1987*. Senator für Bau- und
Wohnungswesen: Berlin

Web Site: -

Key References: MOLITOR, Andreas (2006). "'Der mit dem Zollstock" - Soziale
Innovation, Eine Serie in brandeins Folge 9: Stadtplanung' in:
Brandeins, 09/06. Brandeins: Hamburg
CRAMER, Johannes GUTSCHOW, Niels (1984). 'Berlin 1987' in
: *Bauausstellungen – Eine Architekturgeschichte des 20.
Jahrhunderts*. Kohlhammer: Stuttgart, Berlin, Köln. pp.242-274
SCHLUSCHE, Günter (1997). *Die International Bauausstellung
Berlin – Eine Bilanz*. Arbeitshefte des Instituts für Stadt- und
Regionalplanung, TU Berlin, Heft 59. ISR: Berlin

Author's Involvement: When I started to study architecture in 1988 at the Technical
University the official IBA exhibition year was just over and most
of IBA's building projects were completed. Naturally, the vast
amount of new architecture was both the object of study as well
as the benchmark for our own designs. At that time, the projects
of the *IBA-Old*, the projects of the 'Careful Urban Regeneration'
in Kreuzberg, seemed less exciting and weren't discussed that
much in the studio. Those of the *IBA-New*, with the 'big names'
(Rossi, Eisenman, Cook, Stirling, Botta etc) of the time as well as
a few 'new kids on the block' (OMA), were easier to comprehend
with their overtly formal languages that one would either reject or
copy. Only in hindsight, did the full significance of the *IBA-Old*,
and ultimately its great importance for the city of Berlin as well as
for the development of the architectural praxis, become
apparent. In this respect, I had no other involvement than that of
an exhibition recipient who gained knowledge from the exhibition
in order to further the own architectural development. In respect
of my own exhibition praxis the IBA acted as an early initiator,
pointing towards the vast possibilities of exhibiting architecture.

Subjects of the exhibition

Who are the primary producers?

In this particular exhibition example, the thesis looks specifically at the curator or director of the exhibition as 'primary producer' rather than the numerous architects who exhibited in this building exhibition through their building⁴⁶⁴. As a building exhibition the *Internationale Bauausstellung Berlin 1987* falls into the category of the 'Curated Laboratory'. It is the curator or director of the exhibition who is interesting as the primary producer. In the case of the *IBA-Old*, as in the case of the *7th Architecture Biennale* that we are dealing with in Chapter 11, it is an architect who holds the role as exhibition curator; this architect is Hardt-Walther Hämer.

The following passages will however, make it clear that an exhibition of such a size can never be the sole endeavour of one single subject or indeed curator but that is the result of a co-operation between a large number of different actors. This is even more so the case with the *IBA-Old* that promoted a new participatory way of planning and building, a process that is in itself in contradiction to the sole 'author'.

It can be argued that, although today almost unknown on the international architectural scene, Hardt-Walther Hämer (born 1922) has been one of the most important architects of post-war Germany. This importance is inextricably linked to his work as director of the 'Careful Urban Regeneration' section of the *IBA*. It is an importance that did not arise from any formal or aesthetic qualities of the produced and exhibited architecture but from a new understanding of how architects, planners and politicians deal with the existing urban fabric and the way architecture is produced.

Before taking up the position as one of the two directors of the *IBA* in 1980⁴⁶⁵, Hämer had experimented in the 1970s with new urban regeneration models in the districts of Berlin-Wedding and Berlin-Charlottenburg⁴⁶⁶. This work centred around the premise to renovate old tenement buildings in participatory processes that engage the existing

⁴⁶⁴ For a complete list of architects see: SENATOR FÜR BAU- UND WOHNUNGSWESEN (ed.) (1984). p138

⁴⁶⁵ The second director, responsible for the *IBA* section 'Critical Urban Repair' *IBA-New* was the architect Josef Paul Kleihues (1933-2004).

⁴⁶⁶ Following his architectural studies at the HdK in Berlin, Hämer first worked with the Gebrüder Luckhardt before starting his own architectural practice in 1959. Important works that fall into this early phase are spiritual, cultural and educational buildings such as the *Schifferkirche* in Ahrenshoop from 1951, the municipal theatre and city hall in Ingolstadt from 1966 and the *Katharinen Gymnasium* from 1970, also in Ingolstadt.

tenants, thus opposing the, at that time, still prevailing regeneration policy of demolition and a complete new build. According to the architecture critic Manfred Sack, it is Hämer's insistence on renewal through refurbishment rather than demolition and new-built that made him instantly 'a dissident amongst his colleagues who drift[ed] increasingly into an elitist position'⁴⁶⁷ [author's translation].

The pilot work in Berlin-Wedding and Berlin-Charlottenburg should then become crucial for his appointment as *IBA*-director and paramount for the success of the whole project – both as an exhibition and as a physical transformation of Kreuzberg, one of the most deprived areas in West Berlin in the early 1980s. It is here in Wedding and Charlottenburg that Hämer first developed the participatory processes and planning tools for what was coined the '*Behutsame Stadterneuerung*' or 'Careful Urban Regeneration'. But he also emerged as relentless agitator and fighter for a new architectural and urban praxis that he whole-heartedly believed in.

In regard of Hämer's crucial role for the *IBA*, Andreas Molitor describes him as an 'incubator [who canvassed] for Kreuzberg with the verve of a gifted Hoover salesman.'⁴⁶⁸ [author's translation]. He further recalls some attributes given to Hämer, amongst them: "Saviour of Kreuzberg". 'People's Tribune'. 'Would-be-revolutionary and moderator, philanthropist and enfant terrible, unrelenting Citoyen and blustering awkward fellow'. 'A cheerful anti-capitalist'⁴⁶⁹ [author's translation].

It goes without saying that an exhibition project like the *IBA* is only achievable with a large body of people and not by one curator alone. The *IBA* had a staff of 75 scientists, researchers, architects, designers, and organizers (50 *IBA-Old*, 25 *IBA-New*) as well as 22 publicity staff and general admin. It involved more than 200 different architecture practices (68 *IBA-Old*, 146 *IBA-New*), as well as 20 artists. For the *IBA-Old* the staff was further divided into three working teams – 'Kottbusser Tor' and 'SO 36'⁴⁷⁰, each

⁴⁶⁷ quoted in MOLITOR, Andreas (2006). "'Der mit dem Zollstock" - Soziale Innovation, Eine Serie in brand eins Folge 9: Stadtplanung' in: *Brand eins*, 09/06. Brand eins: Hamburg. p49 [*'Dissidenten unter den zunehmend ins Elitäre strebenden Kollegen'*]

⁴⁶⁸ MOLITOR (2006). p51
[*Hämer übernimmt selbst den Part des Inkubators. Mit der Verve eines guten Staubsaugervertreeters wirbt er für Kreuzberg. Er ist Katalysator, Ideenfabrik und Cheflobbyist in einer Person.*]

⁴⁶⁹ Ibid. p48
[*Retter von Kreuzberg. Volkstribun. Revoluzer und Moderator, Menschenfreund und Bonzenschreck, Baumeister und Berserker, unbeugsamer Citoyen und polternder Querkopf. Ein fröhlicher Antikapitalist.*]

⁴⁷⁰ For the location and extend of the two demonstration areas of *IBA-Old* See Figure 47

responsible for one particular demonstration area, and 'Overlapping Tasks'.

Additionally one has to include all involved housing associations, participating residents groups, building developer and city planners. And crucially, *IBA-Old* co-ordinated a total of 3000 individual self-helpers working in Kreuzberg on the 'Careful Urban Regeneration' of their houses and their district. It seems nevertheless to be appropriate to single out Hardt-Waltherr Hämer as the 'catalyst, ideas factory and chief lobbyist in one persona'⁴⁷¹ [author's translation] for the regeneration of Kreuzberg through the *IBA* exhibition.

Although the programme of the *IBA*, in its report year 1984 as well in its final year 1987, featured a number of specific exhibitions in various institutional or appropriated exhibition venues that had also a traditional exhibition design, these individual exhibition designs are here not considered for the analysis of the *IBA* as an urban laboratory. If one could speak of an 'exhibition design' at all, it would be the in regard of 'masterplans' for the various demonstration areas in Kreuzberg (but that might unnecessarily stretch the term).

Who are the secondary producers?

The audience or recipients of the *IBA-Old* consists of two fundamentally different groups that have very distinct and differing interest in the same objects. On the one hand there is a, predominantly, professional audience consisting of architects, planners, politicians, developers, critics, scholars, students or anyone involved in urban regeneration. On the other hand we have an 'audience' that is actively engaged in the production and the usage of the very objects of the building exhibition. This includes the almost 3000 individuals that were part of the diverse self-help projects, inhabitants and users that engaged in the participatory processes that led to the regeneration of the demonstration areas. But also simply the residents of Kreuzberg who are confronted with the building exhibition on a daily basis be it through work or the use of a cultural, social or educational service located in the buildings.

For the professional audience, the exhibition acts as a demonstration case for new architecture and new processes of urban regeneration. One could argue that this visitor group is not unlike those of most architecture exhibitions that address a predominantly

⁴⁷¹ MOLITOR (2006). p51

[Hämer übernimmt selbst den Part des Inkubators. Mit der Verve eines guten Staubsaugervertreters wirbt er für Kreuzberg. Er ist Katalysator, Ideenfabrik und Cheflobbyist in einer Person.]

professional audience. In contrast to exhibitions in confined venues it is almost impossible to establish audience numbers for a building exhibition that has its various demonstration sites and buildings dispersed over a whole city district⁴⁷². Miller suggests that this professional audience had indeed little 'specific interest in West Berlin's housing shortage or to counter the disastrous effects of urban renewal [... but came to] view urban contexts that seemed to be the result of current attitudes held by members of the international architectural profession [and could be seen nowhere else in the world]'⁴⁷³. The disproportional high amount of coverage or attention that the more iconic projects by internationally renowned architects of the *IBA-New* got might suggest that Miller is right here.

Yet it would do this exhibition and its professional audience injustice to reduce its appeal as being a showcase for latest architectural 'isms' rather than a serious experimentation with new agendas and processes of urban regeneration and urban repair. Today for instance, local politicians, planners, and architects operate almost automatically with concepts of participation when it comes to urban regeneration. It could be argued, that the *IBA* acted here as a catalyst through which this professional audience would engage in a learning process that ultimately changed the way we approach regeneration today.

It is this latter aspect of participation within the 'Careful Urban Regeneration' where the aforementioned second audience group played a vital role. The deliberate integration and active engagement of the local residents in this part of the *IBA* was postulated in the twelve principles of the 'Careful Urban Regeneration'⁴⁷⁴. Already the first and second principles stated that: '1st: The regeneration has to be planned and realized together with the existing residents and local tradesmen while preserving the existing building fabric. 2nd: Planers as well as residents and tradesmen shall agree on the ends and means of regeneration; technical and social planning shall go hand in hand.'⁴⁷⁵ [author's translation]. Hämer describes the effects of these principles as

⁴⁷² Like many other still existing building exhibitions that became part of the normal urban fabric, the *IBA* kept and still keeps attracting 'architectural tourist' who visit, at least the most prominent, buildings.

⁴⁷³ MILLER (1993). p202

⁴⁷⁴ Based on the experience with careful urban regeneration in Wedding and Charlottenburg these 12 principles were developed by Hämer and his team in 1981/82. They were formally sanctioned by the Berlin Parliament in 1983.

⁴⁷⁵ HÄMER, Hardt-Waltherr (1984). 'Für einen liebevollen Umgang mit der Stadt', in: SENATOR FÜR BAU- UND WOHNUNGSWESEN (ed.) (1984). *Leitfaden, Projekte – Daten – Geschichte*. Senator für Bau- und Wohnungswesen: Berlin. p35

follows: 'Through these principles, and in contrast to conventional planning from a distance, the experience of the affected communities becomes the central factor for any planning decisions'⁴⁷⁶ [author's translation].

The residents/audiences of the exhibition are thus veritable producers of the exhibition. They experience and observe as well as create and direct the process of the exhibition production. They are both acting and are acted upon. That this multi-layered role is not without initial and ongoing problems is inevitable. But it is a process that ultimately leads to the empowerment of the local communities or the resident/audience.

Object of the exhibition

What is the exhibition topic / nature of the emerging architecture?

The two key terms and concepts of the 1984/1987 *International Building Exhibition* were 'Careful Urban Regeneration' and 'Critical Urban Repair', the former meaning the renewal of existing city fabric and built structures and the latter meaning a critical repair of the (historic) city fabric through newly built structures. The exhibition aim was thus to demonstrate a new understanding of urban planning, reconstruction and regeneration that would favour point intervention rather than large-scale masterplans. In regard of the IBA-Old this included the demonstration of participatory planning and renovation processes. It was further a (successful) attempt to save a particular district of Berlin, Kreuzberg, that was according to Molitor 'an area of disinvestment and advanced disintegration before Hämer started his work on the *IBA-Old*. A dead-zone'⁴⁷⁷ [author's translation].

For Hämer, the wider definition of the term and concept 'culture', and implicitly architecture, is crucial here. He proclaims that '[...] the term culture ought not to be reduced to the 'artistic' but has to comprise life as a whole. In such a run-down and semi-destroyed area like Kreuzberg, work on the urban renewal can only be

[1. Die Erneuerung muß mit den jetzigen Bewohnern und Gewerbetreibenden geplant und – substanzerhaltend – realisiert werden. 2. Planer sowie Bewohner und Gewerbetreibende sollen in Zielen und Erneuerungsmaßnahmen übereinstimmen, technische und soziale Planung Hand in Hand gehen.]

⁴⁷⁶ HÄMER (1984). p36

[Anders als bei herkömmlichen Planungen aus der Ferne wird mit diesen Grundsätzen die Erfahrung der Betroffenen zur zentralen Entscheidungsgrundlage.]

⁴⁷⁷ MOLITOR (2006). p50

[Als Hämers IBA-Alt ihre Arbeit aufnimmt, ist Kreuzberg Desinvestitionsgebiet im fortgeschrittenen Stadium des Verfalls. Tote Zone.]

understood as a part of an entire cultural development'⁴⁷⁸ [author's translation]. He sees the approach that the Careful Urban Regeneration has to take as a holistic one in which 'a cultural stipulation should in fact be developed in every form of aesthetically and politically aware living, dwelling and working'⁴⁷⁹. The aim was 'to materialize democracy within the city'⁴⁸⁰ [author's translation].

What is the architectural research that is conducted through the exhibition?

Lore Ditzen lists a 'number of specific models [that] were to be tested' in conjunction with IBA's main tasks – 'Careful Urban Renewal' and 'Critical Urban Repair'. These included models 'for ecological and energy-saving construction, for local urban economies and participation, for new dwelling forms and the dwelling of specific social groups, for the combination of living and working, for the humanisation of transport and landscape planning'⁴⁸¹ [author's translation]. The experimental character of these activities is underlined through the way in which 'all working steps and results were to be scientifically conducted' as Ditzen explains⁴⁸². She further calls 'the interrogation of reality'⁴⁸³ the most important planning tool for the 'Careful Urban Regeneration'.

According to Ditzen, the 'learning process' was, for those who made the exhibition, as important than any exhibition results of the IBA itself. She writes that: 'If one asks the ca 80 staff of the International Building Exhibition what significance and meaning the

⁴⁷⁸ ZWOCH (1987). p247

[... Der Begriff der Kultur darf sich nicht auf das Künstlerische beschränken, sondern muß das Leben insgesamt erfassen. In einem so heruntergewirtschafteten und halb zerstörten Gebiet wie Kreuzberg ist die Arbeit an der Stadterneuerung überhaupt nur zu begreifen als ein Element der gesamten Kulturentwicklung.]

⁴⁷⁹ ZWOCH (1987). p249

[Ein kultureller Anspruch sollte eigentlich in jeder Daseinsform hinsichtlich des ästhetischen und politisch bewußten Lebens, Wohnens und Arbeitens entwickelt werden]

⁴⁸⁰ ZWOCH (1987). p249

[Demokratie in der Stadt verwirklichen]

⁴⁸¹ DITZEN, Lore (1984). 'Lernprozesse – Ein Blick in die IBA-Geschichte' in: SENATOR FÜR BAU- UND WOHNUNGSWESEN (ed.) (1984). *Leitfaden, Projekte – Daten – Geschichte*. Senator für Bau- und Wohnungswesen: Berlin. p 28

[In Verbindung mit ihren Hauptaufgaben [Stadterneuerung und Stadtreparatur] sollten besondere Modelle erprobt werden – zum Beispiel für ökologisches, für energiesparendes Bauen, für Stadtökonomie und Bürgerbeteiligung, neue Wohnformen und das Wohnen besonderer sozialer Gruppen, die Verflechtung von Wohnen und Arbeiten, Verkehrshumanisierung und Grünplanung.]

⁴⁸² Ibid. p28

[Die Arbeitsschritte und Ergebnisse sollten wissenschaftlich begleitet werden.]

⁴⁸³ Ibid. p32

[Wichtigstes Instrument der Planung wurde so die Befragung der Wirklichkeit [...]]

five years of working for the IBA have for them, they answer all with the same thrust, which could also be the motto of the whole enterprise: a learning process'⁴⁸⁴ [author's translation]. This learning process is not just a passive one in a sense that one would learn from the exhibited object but also a very active one that included a broad range of acting subjects. Ditzen writes here that: 'This learning process does not only refer to innovation through an architecture of first rank [...]. One learnt at this IBA most of all from all those people that live in the IBA-demonstration areas and who had already for a long time opposed the destruction of their quarter. In their activities, the paradigm shift that characterised the development of the building exhibition, and here particularly of that in the Urban Renewal [section of the exhibition], found companions and allies'⁴⁸⁵ [author's translation].

Processes and form of the exhibition

How is the exhibition 'set-up' in order to provide the testing ground for the architectural research?

The IBA and its specific set up as an architectural laboratory cannot be isolated from the specific situation of West-Berlin and its district Kreuzberg in particular. As Cramer and Gutschow assert, 'the IBA wouldn't have been possible in this form without the extensive dereliction of the urban realm [in Kreuzberg], but it would also not have been necessary'⁴⁸⁶ [author's translation]. And Hardt-Walther Hämer describes the special Berlin-specific situation that allows it to become a place of experiment in the following passage: 'The questions, regarding the urban regeneration, appear, in principle, everywhere as they do in Berlin. Only the problems are here in many respects more apparent and more pronounced. This is why a lot of things can be studied here in Berlin under 'laboratory conditions' that, in principle, appear everywhere. Berlin is [...] a laboratory for urban development'⁴⁸⁷ [author's translation]. More specifically, Hämer

⁴⁸⁴ Ibid. pp23-24

[Wenn man die ca 80 Mitarbeiter der Internationalen Bauausstellung fragt] was die fünf Jahre IBA-Tätigkeit für sie bedeuten, so antwortet jeder im gleichen Sinn, wie er dem ganzen Unternehmen als Motto voranstellen könnte: ein Lernprozess.]

⁴⁸⁵ Ibid. p24

[Mit dem Lernprozess] ist keineswegs nur die Innovation durch Architektur erster Güte gemeint ... gelernt wurde bei dieser IBA vor allem von den Menschen, die in den IBA-Demonstrationsgebieten leben und schon früh gegen weitere Zerstörung aufbegehrten. In ihren Aktivitäten fand das Umdenken, das die Planungsarbeit der Bauausstellung besonders in der Stadterneuerung charakterisiert, Wegbereiter und Verbündete.]

⁴⁸⁶ CRAMER and GUTSCHOW (1984). p270

[Ohne die großflächige Verwahrlosung des Stadtraumes wäre die IBA in dieser Form nicht möglich, aber auch nicht nötig gewesen.]

⁴⁸⁷ ZWOCH (1987). p246

identifies '... the erection of the Berlin wall [that] had as a result that central, inner city areas like Kreuzberg were severed from the old city centre [that was now in East Berlin] and found themselves in a peripheral situation [to West-Berlin's new centre]. Such urban quarters at the periphery offer niches for development that wouldn't emerge in a normal quarter'⁴⁸⁸ [author's translation].

Yet the important aspect of these niches is not their spatiality but the social activity within them or, as Hämer puts it, 'it is important what people do with them'⁴⁸⁹ [author's translation]. According to Hämer, one can 'find in these niches in Kreuzberg people who think differently, who integrate themselves differently into life in general, who try out new things and who can therefore also become agents of cultural development'⁴⁹⁰ [author's translation]. As examples Hämer mentions here artists of the so-called 'Neuen Wilden'⁴⁹¹ or young fashion designers. One would also have to mention the German Punk and New Wave music scene that relied on Kreuzberg as their cultural and social locale.

Beside the specificity of the Kreuzberg locality there are several further elements that contribute to or facilitate the experimental set-up of the building exhibition. First and foremost this would be the mode of operation of the IBA and the IBA-Old in particular. In comparison with a single monographic exhibition within a gallery, a building exhibition within an existing urban, social and political context is a considerably more complex undertaking. This concerns its organisational structure, its political incentive

[Die Fragen, die Stadterneuerung betreffen, stellen sich im Prinzip überall genauso wie in Berlin, nur sind die Probleme hier in mancher Beziehung besonders massiv und besonders zugespitzt, und deshalb kann manches in Berlin unter "Laborbedingungen" vorweg studiert werden, was anderswo im Prinzip genauso auftaucht. Berlin ist also ein Labor für Stadtentwicklung.]

⁴⁸⁸ Ibid. p247

[... der Bau der Mauer führte dazu, daß zentral gelegene Innenstadtgebiete wie Kreuzberg von der alten City abgetrennt worden und dadurch in eine Randlage geraten sind. Solche Stadtquartiere am Rand bieten Entwicklungsnischen, die sich so in einem normalen Gebiet nicht herausbilden.]

⁴⁸⁹ Ibid. p247

[Es geht aber nicht nur um räumliche Nischen, sondern es geht vor allem darum was Menschen damit anfangen]

⁴⁹⁰ Ibid. p247

[Wir finden in diesen Nischen in Kreuzberg Leute, die anders denken, die sich anders in das Leben einbinden, Neues versuchen und deshalb auch Träger von kultureller Entwicklung sein können.]

⁴⁹¹ In Berlin this included artists such Rainer Fetting, Helmut Middendorf, Salomé, Bernd Zimmer or Elvira Bach. The defining exhibition of this group was *Zeitgeist* in the Martin-Gropius-Bau in 1982. See also KLOTZ, Heinrich (1984). *Die Neuen Wilden in Berlin*. Klett-Cotta Verlag: Stuttgart

and mandate, its economic and financial basis, the form of land and building acquisitions, as well as its implementation and actual construction process.

It would go beyond the remit of this thesis to go into detail of all these aspects. This relates in particular to the very specific politico-geographical situation of West-Berlin pre-1989 and the complicated German federal subsidy system but also to the complex political and ideological development towards the *IBA* from its first inception in 1975 to the official political mandate in 1978/79 should not be dealt with here at this point⁴⁹². The analysis shall rather concentrate here on the aspects concerning the organization of implementing the building exhibition and the production or construction of the actual exhibits, the buildings. Both these aspects are ultimately dealing with the experimentation and establishment of a democratic planning and construction process.

A crucial step for *IBA-Old* in the preparation of these processes was a public call for '*Strategien für Kreuzberg*' [Strategies for Kreuzberg] that was made in 1977 and which got more than hundred proposals for self-help groups, neighbourhood improvement schemes, new living and dwelling models, social infrastructure and the re-use of existing buildings⁴⁹³. Out of the diversity of proposals sprang for instance the citizens association SO36 who should later become involved in every further planning process of the area⁴⁹⁴.

The *IBA-Old* and the 'Careful Urban Regeneration' led to the introduction of a 'new infrastructure of neighbourhood democracy', including as its two main elements 'tenant approval' and 'tenant advice'⁴⁹⁵. Self-help became an integral part of the urban renewal process. In order to inform this process the means of the *IBA* as an exhibition, as a demonstrative project based within the actual community was paramount. Krüger writes that 'the *IBA* provided advice on organizational and technical matters seeing its

⁴⁹² For a comprehensive critical appraisal of the *IBA* see: SCHLUSCHE, Günter (1997). *Die Internationale Bauausstellung Berlin – Eine Bilanz*. Arbeitshefte des Instituts für Stadt- und Regionalplanung der TUB. Technische Universität Berlin: Berlin
For a presentation of the political preparation process for *IBA* see: CRAMER and GUTSCHOW (1984). pp242-253

⁴⁹³ See DITZEN (1984). p27

⁴⁹⁴ SO36 refers to the historical postal area '*Süd-Ost 36*' (south-east 36) that originally included areas in Berlin-Mitte and Berlin-Treptow, which were cut off by the Berlin Wall from 1961-1989. It then became the signifier for a smaller part within Kreuzberg that was also one of the key demonstration areas of the *IBA*. SO36 is also an alternative music venue that was the locale for the 1984 exhibition '*IBA vor Ort / IBA on location*'.

⁴⁹⁵ KRÜGER, Angelika (1993). 'Local Communities and Urban Regeneration: The Contribution of Community Education' in: *Community Development Journal*, Vol.28 No.4 October 1993. p348

role as a centre for passing on information and experience in questions concerning renovation of old houses, insurance, finance, legal aspects and taxes, costs estimates etc.⁴⁹⁶. By 1987, IBA had supported numerous self-help projects through the means of information-drop-in-centres, the publication and distribution of brochures and videos, the staging of neighbourhood exhibitions, the mentoring of apprentices groups, and the co-ordination of 3000 individual self-helpers working in Kreuzberg. Hämer explains the incentive behind this approach when he says that 'we do not achieve anything if we don't prop up the people together with propping up the buildings'⁴⁹⁷ [author's translation].

Hämer makes it clear that the main experiment conducted during the *IBA-Old* was in its essence a political experiment. He argues '... that, at long sight, only an increasingly practised democratization holds a future [for long-term urban planning], also for the professionals and the political decision makers. ... Every creative work on the city has to be integrated into a system that, in the long-term, democratizes itself. A centralised concentration of power would not allow for [the creation of] a culturally divers urban fabric'⁴⁹⁸. Today, local politicians, planners, and architects operate almost automatically with concepts of participation. But in the late 70s and early 80s these were still un-tested approaches for the regeneration of a whole city and one could regard IBA's most lasting effect on architecture and planning originating from the successful demonstration of these new approaches.

How are various media used in order to materialize, test and mediate architectural propositions?

The 'scale' of media in a building exhibition change in comparison to a gallery or museum exhibition. As the city, the urban realm becomes the actual exhibition venue it is now the building itself that acts as the primary medium of a building exhibition. Nevertheless, this primary medium, the building, is usually accompanied by a whole range of secondary media that support the buildings as exhibit. These can range from

⁴⁹⁶ Ibid. p349

⁴⁹⁷ Cited in MOLITOR (2006). p54
[„Wenn wir mit den Gebäuden nicht auch die Menschen aufrichten“, hat er mal gesagt, „richten wir überhaupt nichts aus.“]

⁴⁹⁸ ZWOCH (1987). p249
[Ich behaupte ... daß auf lange Sicht nur die versträrkt praktizierte Demokratisierung eine Zukunft [für langfristige Stadtplanung] hat, auch für die Fachleute und politischen Entscheidungsträger. ... Jede kreative Arbeit an der Stadt muß in ein sich langfristig demokratisierendes System eingebunden sein, weil sonst zentralisierte Machtfülle ein kulturell vielfältiges Stadtgebilde gar nicht zulassen würde.]

guided tours to additional exhibitions 'within the exhibition', to catalogues and brochures that all contain again different media such as text, architectural drawings, photographs etc.

The *IBA* and *IBA-Old* are no exceptions in this regard. The *IBA* held during the early 1980s, in the run-up of the actual exhibition start, as well as during the so-called report-year of 1984⁴⁹⁹ and in the final exhibition year of 1987 numerous exhibitions that were again accompanied by symposia, workshops, and film screenings. In addition, information-drop-in-centre and community forums provided a space for the exhibition and discussion of neighbourhood projects. These exhibitions within the exhibition would have used all different media (presentational and representational) in order to communicate between producers and audience. The *IBA* and the Berlin Senator for Building and Housing further published a whole series of catalogues documenting the progress and results of the exhibition. Furthermore one has to mention all information brochures, leaflets and videos that acted as practical support for self-help groups and individuals involved in the renovation process of their buildings.

Yet the main media of the exhibition remained the 56 building and landscape projects in the two demonstration areas *Luisenstadt* and *SO36* in the district of Kreuzberg⁵⁰⁰. Most of the housing projects encompass the regeneration of an entire city block, in total 23 city blocks, thus including each several 19th century, five-storey, '*Mietskasernen*' [tenement 'barracks'] with their front houses, side wings and back- or cross buildings⁵⁰¹. According to Molitor 'Hämer's ten-year period of careful urban renewal finally generates 10.000⁵⁰² modernised flats, uncounted new bathrooms, toilets, central heating systems, leak-proof roofs and windows. On top of that, new children day-care centres and schools, a Turkish-German neighbourhood centre, a social service centre and quite a number of green spaces in cleared courtyards'⁵⁰³ [author's translation].

⁴⁹⁹ For a complete list of exhibitions and events during the report year see: SENATOR FÜR BAU- UND WOHNUNGSWESEN (ed.) (1984). pp44-45

⁵⁰⁰ For a complete list project list see appendix of SENATOR FÜR BAU- UND WOHNUNGSWESEN (ed.) 1984). *Leitfaden. Projekte Daten Geschichte -Zur Internationalen Bauausstellung Berlin 1987*. Senator für Bau- und Wohnungswesen: Berlin

⁵⁰¹ For a comprehensive study on the Berlin Tenement see GEIST, Johann Friedrich and KÜRVERS, (1984). *Das Berliner Mietshaus. Band 2: 1862 – 1945*. Prestel Verlag: Munich

⁵⁰² This figure refers to the total amount of flats that were renovated under Hämer's directorship of the *IBA* and the follow on organization *STERN*. During the *IBA* almost 6000 flats were renovated.

⁵⁰³ MOLITOR (2006). p51

As one example one could take here Block 133⁵⁰⁴ (Cuvrystrasse/Wrangelstrasse) in SO36 where 165 flats were renovated and modernised - including 30 flats in the self-help-programme - a new nursery with 156 places was built and a 19th century, inner-block factory building could be saved and modernised. According to Wulf Eichstädt, member of the *IBA-Old* team for SO36, 'Block 133 lived through all stages of the regeneration conflicts and reforms in the period from 1979 to 1984'⁵⁰⁵. Originally designated to be part of the large-scale demolition and new built strategy for Kreuzberg, parts of the block and the factory building were squatted or '*instandbesetzt*'⁵⁰⁶ in 1979 and became a centre and main focal point of the Berlin squatting movement. Through the year-long mediation and advocacy by the *IBA* the block could be saved and was renovated bit-by-bit in co-operation with the occupants. It thus became a prime example of the cumbersome transformation processes that have been accompanied and exhibited by the *IBA*.

How does the exhibition use its temporality as well as its spatial and economic parameters in order to achieve its ends?

Probably the most interesting aspect is here the temporality of the exhibition that differs substantially from the following case studies. The long preparation process, starting already with the first proposals for a new building exhibition in 1975, has already been mentioned above. But it is also the exhibition's long duration over four years and its inherent process character that make this aspect peculiar.

While, most building exhibitions before the Berlin *Interbau 1957* opened to the public with the buildings finished, the building site is made, from then on and 'partly out of

[Hämers zehnjährige Ära der behutsamen Stadtsanierung bringt Kreuzberg schließlich 10 000 modernisierte Wohnungen, ungezählte neue Badezimmer, Innenkios, Etagenheizungen, dichte Dächer und Fenster. Außerdem neue Kitas und Schulen, ein türkisch-deutsches Nachbarschaftszentrum, ein soziales Dienstleistungszentrum und jede Menge Grünflächen in freigeräumten Hinterhöfen.]

⁵⁰⁴ The city blocks within the regeneration area Kreuzberg were already numbered prior to the *IBA*.

⁵⁰⁵ EICHSTÄDT, Wulf (1984). 'Cuvrystraße 20-23 und 25-27 / Wrangelstraße 56 (Block 133)' in: SENATOR FÜR BAU- UND WOHNUNGSWESEN (ed.) (1984). *Leitfaden. Projekte Daten Geschichte -Zur Internationalen Bauausstellung Berlin 1987*. Senator für Bau- und Wohnungswesen: Berlin. p131

⁵⁰⁶ The German term '*instandbesetzt*' is an amalgamation of '*instandsetzen*' – to renovate/ to modernize – and '*besetzen*' – to squat. It was used to in the late 1970s and 1980s to indicated the self-help agenda of the squatters who would aim to renovate and modernise the squatted buildings, a process that often let, after long struggles, to the legalization of the squat.

necessity, an exhibit in its own right'⁵⁰⁷ [author's translation]. This necessity arises from the fact that exhibitions such as the *Interbau*, but the *IBA 1984/87* in particular, were not finished on time and had thus mostly unfinished buildings or building sites to exhibit⁵⁰⁸. Cramer and Gutschow assert that, during the report year 1984, Kreuzberg was quasi the 'biggest building site' of Berlin⁵⁰⁹. But the delay in the completion of buildings is not the only reason that the building site becomes the exhibit. The exhibition of the unfinished building is further necessary as the modernised buildings and regenerated city blocks become immediately occupied and inhabited once they were completed. The interiors of the buildings were hence no longer accessible for a broader exhibition audience⁵¹⁰.

While the construction process had already previously been a topic of many building exhibitions and had been presented in special sub-exhibitions (on new building materials, sanitation, construction methods etc) the building process became now not only a veritable topic of the exhibition but the site visit became also an important means to present architecture. Miller suggests here that 'a significant part of *IBA*'s institutional structure was dedicated to encouraging visits to the sites'⁵¹¹ and an important part of the *IBA*'s exhibition activities was indeed constituted by the numerous organized tours to building sites. Yet, probably more important than the site visits by a professional exhibition audience is the building site's function as a means of demonstration for those actually involved in the regeneration of the area and its buildings. The long-lasting transformation and regeneration process allowed the various actors of this process – politicians, planners, architects, builders, residents, self-help-groups etc – to gain knowledge and experience not only through a project they were directly involved in. They could also draw comparisons with similar projects and learn from their experiments and experiences. The temporality, or more precisely, the long duration of the exhibition was thus an important factor for the set up of the

⁵⁰⁷ CRAMER and GUTSCHOW (1984). p22
[*'In Berlin wird – vielleicht eher der not gehorchend – die Baustelle kurzerhand zum Ausstellungsgegenstand'*.]

⁵⁰⁸ The *IBA* was originally planned to be held in 1981. The decision to postpone the *IBA* from 1984 to 1987 was only made in 1983 when it became apparent that many of the proposed projects would not be completed in time.

⁵⁰⁹ CRAMER and GUTSCHOW (1984). p266

⁵¹⁰ In building exhibitions such as the *Weissenhofsiedlung* in Stuttgart the interior of the buildings presented still an important part of the exhibition and a building by, for instance, Mies van der Rohe would showcase a number of different flat layouts and interior designs by various architects such as Lilly Reich, Franz Schuster, Adolf Meyer, Adolf Schneck, Arthur Korn or the Swiss *Werkbund* Collective.

⁵¹¹ MILLER (1993). p202

exhibition. Hämer says in this regard that '[...] we had eight years to learn how to principally organize a democratic planning process'⁵¹².

How do 'elements of uncertainty' or 'risk', incorporated into the exhibition, affect the implementation, perception and result of the exhibition?

As in all process driven exhibitions the largest element of 'uncertainty' existed in regard to the actual result of the exhibition. In this particular exhibition this uncertainty was of course a prolonged process as the *IBA* developed and got implemented over the course of almost 10 years. The assumption that the 'Careful Urban Regeneration' concept would lead to a successful transformation of Kreuzberg from one of the poorest and disadvantaged areas in Berlin into a socially stable and sustainable inner city living quarter was, although wholeheartedly supported by its proponents, by no means guaranteed when the *IBA-Old* got the political go-ahead.

Exposed to political quarrels and changes on a city and district level, confronted with local politics driven by interest groups as diverse as the radical squatting movement or the Turkish immigrant community and depending on the Berlin housing associations and construction companies to play along, the *IBA* had to bring these differing concerns, prejudices, values and interests together. This inevitable brought uncertainties into the process and also included the risk of partial failure.

How does the exhibition form an integral and critical part of the architectural praxis?

The *IBA* exhibition and the architectural praxis of regenerating a whole area and of establishing new forms of participatory architecture and democratized planning form an inseparable unity. The *IBA* tested the 'Careful Urban Regeneration' as a new concept of dealing with existing, run down inner city areas, proving also the economic viability of this approach. Participatory processes are today part and parcel of the planning culture in most cities - although probably not to the same degree as exercised in Kreuzberg during the *IBA*. But *IBA-Old* did not only define a new urban praxis per se but it also helped establish the working method for numerous architectural practices that were involved in the *IBA*. Furthermore, *IBA* demonstrated that the users, the inhabitants could become crucial actors and producers within the regeneration process. Cramer and Gutschow assert here that 'much more important than the new

⁵¹² ZWOCH (1987). p249

[In Kreuzberg, in einem bebauten Gebiet, haben wir acht Jahre Zeit gehabt, zu lernen, wie man einen demokratischen Planungsprozess grundsätzlich organisieren kann.]

buildings at the Schlesiſches Tor [a.o. by Alvaro Siza or Otto Steidle] ... or on the Fraenkelufer [by Heinrich and Inken Baller] and maybe one of the decisive results of the building exhibition are going to be the successes of the 30 self-help-groups'⁵¹³ [author's translation].

Typological context of the exhibition

How does the exhibition fit into the typological categorisation of Laboratory Exhibitions as explored in PART II?

The *IBA* could be described under all three typologies. As a building exhibition presenting actual buildings it is per default an exhibition of architecture in 'Real Scale'. Through *IBA-Old*'s emphasize to experiment with the actual planning and production process it is also a veritable 'Place of Architectural Production'. While previous building exhibitions usually opened to the public with the more or less finished building ensemble, the *IBA* made a deliberate effort to showcase the whole production process, from participatory planning stages to the construction of new or renovation of existing buildings. It was a process of experimentation and learning, or, in the words of Hardt-Walther Hämer, the *IBA* team as well as the involved architects or the planning authorities of the city of Berlin had 'eight years to learn how to principally organize a democratic planning process'⁵¹⁴. The *IBA* furthermore fulfils the criteria of a 'Curated Laboratory' as it is the curator or director of *IBA-Old*, Hämer, and his team that define the experimental set-up of the exhibition. This happens trough the designation of the various demonstration areas and specific buildings that are to be 'carefully renewed', the definition of specific building projects, programs or tasks, the selection of participating architects, and the moderation of the 'democratic planning process' which generates the exhibition and enables the 'Careful Urban Renewal'.

⁵¹³ CRAMER and GUTSCHOW (1984). p266

[Viel wichtiger als die Neubauten am Schlesiſchen Tor [u.a. by Alvaro Siza and Otto Steidle] ... und am Fraenkelufer [Hinrich und Inken Baller] und vielleicht eines der entscheidenden Ergebnisse der Bauausstellung werden die Erfolge der etwa 30 Selbsthilfegruppen sein.]

⁵¹⁴ ZWOCH (1987). p249

How do historical precedents such as the described studiolo, Kunstkammer, cabinet de curiosité, museum, academy, studio, world exposition, building exhibition, installation, or elements thereof, relate to this specific exhibition?

The *IBA* stands in the tradition of building exhibitions that, as Cramer and Gutschow assert are also almost exclusively, building exhibitions⁵¹⁵. However, in contrast to these predecessors that '[were] staged as a *Gesamtkunstwerk* on a small and confined area (as on the *Mathildenhöhe* in Darmstadt in 1901), exhibited model houses (as in Stuttgart in 1908 or 1927), or were concerned with the construction of exemplary '*Siedlungen*' (as in Leipzig in 1913, Prague in 1932, or Munich in 1934 etc)⁵¹⁶ the *International Building Exhibition Berlin 1984/1987* addresses a completely different scale as it deals with the urban regeneration for an existing inner-city area stretching over a length of almost 7km. It is by far the biggest building exhibition to that date and Cramer and Gutschow argue that 'in terms of the number of contributions, its comprehensive claim to solve all questions of contemporary architecture and urban design, as well as its divers methods of resolution the International Building Exhibition Berlin 1987 (*IBA*) leaves all previous building exhibitions behind'⁵¹⁷ [author's translation]. It is further important to note that, while previous exhibitions dealt almost exclusively with the construction and exhibition of new buildings, the *IBA-Old* part of *IBA* dealt with existing buildings and strategies to save and regenerate them.

While the *IBA* stands within this general lineage of building exhibition one has to regard it also more specifically in the context of Berlin and its various building exhibitions since the early 20th century. This tradition is already mentioned in the original *IBA* proposal written by the West-Berlin Parliament which deliberately makes the reference to earlier building exhibitions in Berlin by stating that: '[The *IBA*] belongs to the tradition of the city [of Berlin] to influence the direction of city planning in the 'Industrial age' with international building exhibitions'⁵¹⁸. This refers to exhibitions such as the 1911 *Entwürfe für die Großstadt* competition exhibition that defined a mile stone in presenting new urban planning approaches; the building exhibition *Siedlung im Fischtalgrunde* from 1928, coordinated or 'curated' by Heinrich Tessenow which

⁵¹⁵ See here also PART II, Chapter 7, Section 'Building exhibitions'

⁵¹⁶ CRAMER and GUTSCHOW (1984). p242

⁵¹⁷ Ibid. p7

[Die Internationale Bauausstellung Berlin 1987 ... [stellt] mit der Zahl der Beiträge, dem umfassenden Anspruch zur Lösung aller Fragen der gegenwärtigen Architektur und Stadtbaukunst und den vielfältigen Lösungsansätzen alle bisherigen Bauausstellungen weit in den Schatten.]

⁵¹⁸ MILLER (1993). p202

showcased 75 individual houses and as well as tenement buildings⁵¹⁹; the *Deutsche Bauausstellung* [German Building Exhibition] from 1931 with its major exhibition *Die Wohnung unserer Zeit* curated by Ludwig Mies van der Rohe; or the *Interbau 1957* on the area of the war-destroyed *Hansaviertel* that presented a radical break with the traditional Berlin inner-city block pattern through modernist planning and architecture. In that respect, large scale urban projects that also act as exhibitions, whether declared or not are nothing new for Berlin. And according to the German architectural critic Felix Zwoch 'Berlin ... has always been a place of the experiment where the 'New' and the 'Different' have been tested'⁵²⁰.

⁵¹⁹ The *Siedlung Fischthalgrunde*, initiated and built by the housing association GAGFAH can be seen as a more traditionalist 'counter-exhibition' to the modernist architecture of the other large housing association in Berlin, the GEWOBAU that built most of Bruno Taut's *Siedlungen*. It is also a counter position to the modernist *Weißenhofsiedlung* exhibition in Stuttgart that had opened in the previous year. In that respect, the *Siedlung Fischthalgrunde* as well as the *Weißenhofsiedlung*, are good examples how ideological positions, here 'expressed' through the so-called *Dächerstreit* or roof dispute (pitched roof against flat roof), can be promoted through exhibitions.

⁵²⁰ ZWOCH (1987). p246

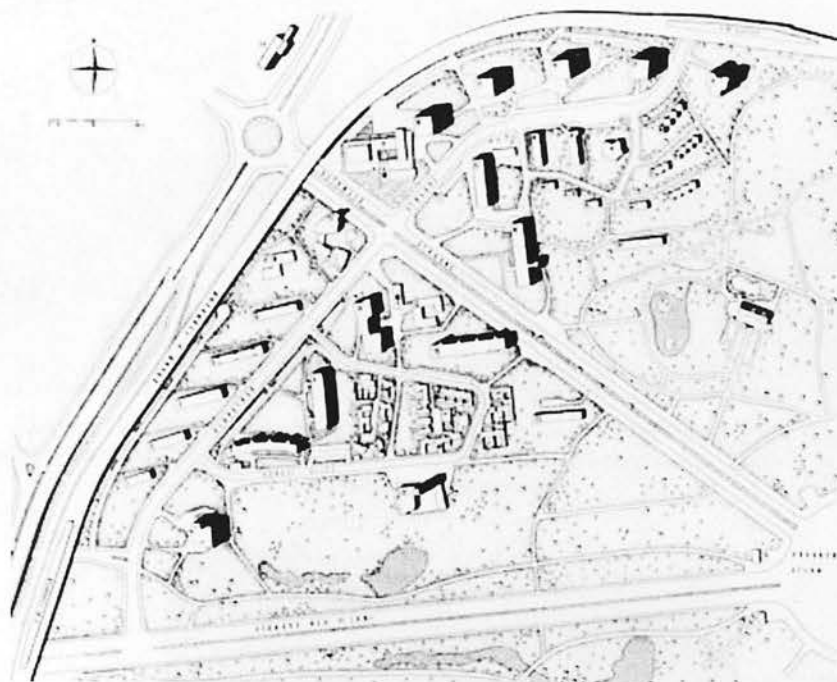


Figure 45: Interbau 1957. Plan showing modernist planning principles after clearing the war damaged Hansa Viertel with all its 19th century tenement buildings, or Mietskasernen.

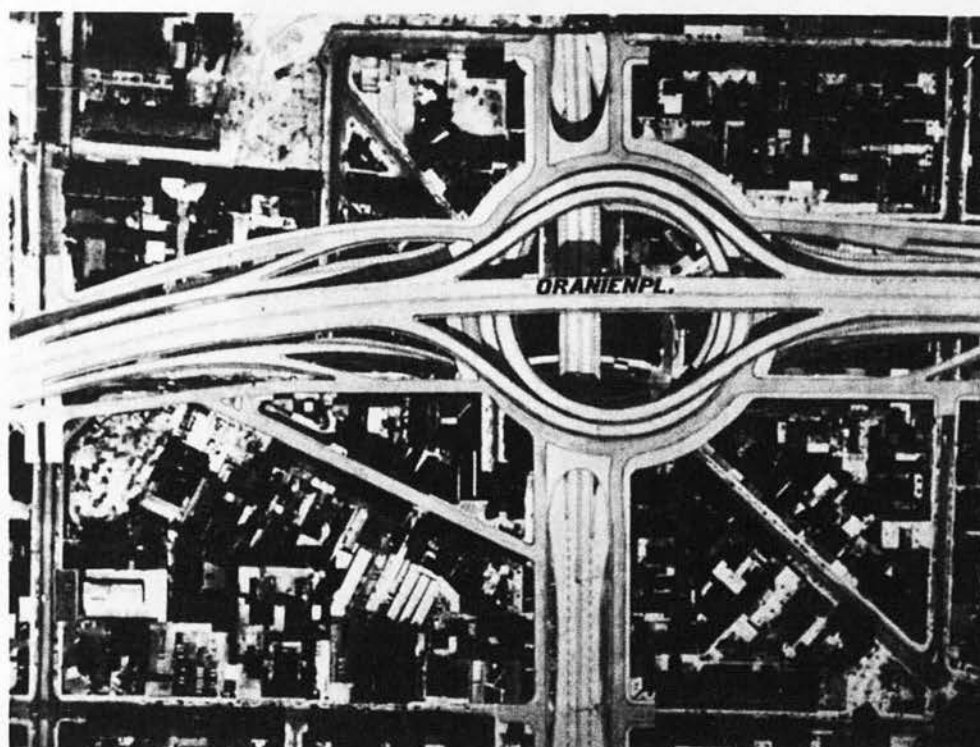


Abb. 471 Sanierungsgebiet Kottbusser Tor. Photomontage der geplanten Autobahnen mit großflächigem Knotenpunkt im Bereich des Oranienplatzes.

Figure 46: Photomontage illustrating the planning proposals of an urban motor through Kreuzberg prior to the IBA.



Figure 47: Plan, 1982, showing the whole IBA demonstration area as it stretches almost 7km from Tiergarten to Kreuzberg. IBA-Old is located in the still densely built-up area towards the east.



Figure 48: Dresdener Strasse in 1981 and 1984, before and after the 'Careful Urban Regeneration'. Note the shops that were able to remain in the buildings.



Figure 49: 'Instandbesetzt' - Squatted buildings in the Manteufelstrasse ca 1981. One of numerous squatted buildings that became part of Careful Urban Regeneration programme of IBA-Old in which squatters were aided in the renovation of their buildings through self-help.



Figure 50: Regeneration proposal by the group Oekotop. Radical transformation into ecological and 're-naturalized' city block - not executed.



Figure 51: Community commission on site, Block 133



Figure 52: Public presentation and discussion of planning proposals at Schlesisches Tor.

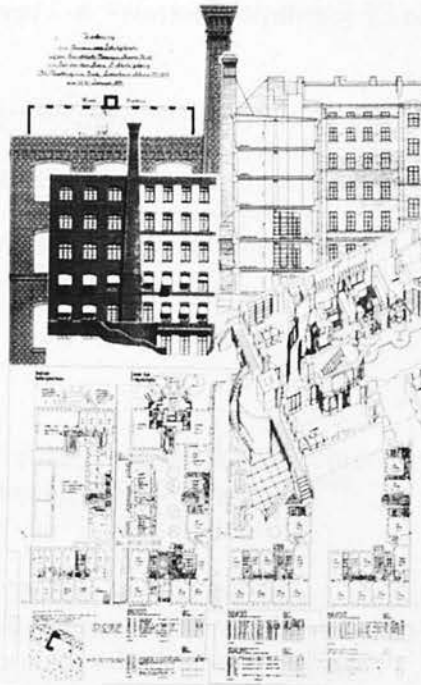
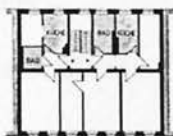


Figure 53: Design for Naunynstrasse 69 by Löw & Watzke and Axel Volkman. The factory building is transformed into a child care centre (KITA), alleviating the underprovision of social infrastructure in Kreuzberg

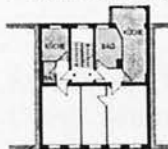
* Außenbau: Dach, Fassade, Fenster.
Gebäude innen: Geschosdecken, Treppenhaus, Keller, Wohnungen, Wände, Türen, Anstrich, Grundriss.
Haustechnik: Wasser, Abwasser, Elektro, Gas, Sanitärtechnik, Ofen.
* Sozialplan: Umzugskosten, Mietminderung, Mietaufschlag, Mieterberatung usw.

Baukosten:
1.442 DM/qm =
54% der Neubaukosten

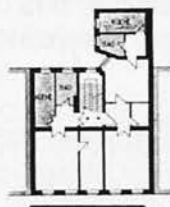


IX.8

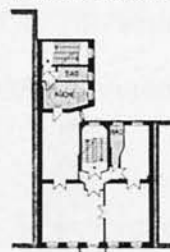
Baukosten:
1.735 DM/qm =
65% der Neubaukosten



Baukosten:
1.473 DM/qm =
56% der Neubaukosten



Baukosten:
1.070 DM/qm =
40% der Neubaukosten



Baukosten:
956 DM/qm =
36% der Neubaukosten

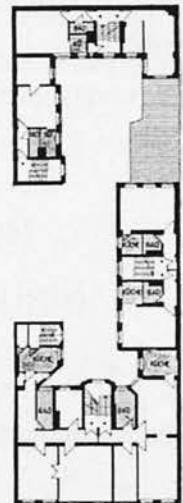


Figure 54: Building cost analysis for various tenement buildings, demonstrating that the careful regeneration is less expensive than a complete new built.

CHAPTER 9 – *Architectural* – A Trans-disciplinary Exhibition

In my work, it is important for me to bring my own experience into the design process. Not just to mirror myself as an individual, but to find myself within the work. ... In my rucksack, I have all the images and all the architectures that I have once seen or experimented with and which I then reflect onto what is there as the concrete mentality of the place.

Otto Steidle in the interview with the author⁵²¹

Exhibition data:

- Exhibition Title: *Architectural – Otto Steidle, Verena von Gagern – Zwischen Architektur und Photographie*⁵²²
- Architect(s): Otto Steidle, Steidle + Partner, Munich
Curator: Florian Kossak with Verena von Gagern
Exhibition Designer: Florian Kossak, Steidle + Partner
Others involved: Verena von Gagern
- Exhibition Date(s): 04 November 1993 – 16 January 1994
- Exhibition Venue(s): *Architekturgalerie München*, Munich
Venue Type: Private, non-for profit, architecture gallery
- Exhibition Sub-type: Place of Architectural Production; Curated Laboratory
Architect/Artist Collaboration / Monographic exhibition /
Travelling and transforming exhibition
- Source material
Interview: Kossak – Steidle (interviewed for 7th Biennale)
Press Text: in German
Catalogue: STEIDLE, Otto and VON GAGERN, Verena (1993).
Architectural. Nazraeli Press: Munich
Web Site: -
- Key References: KOSSAK, Florian (ed) (1994). *Bewohnbare Bauten/Structures for Living*. Artemis: Zurich
- Author's Involvement: *Architectural*, the book and the exhibition constituted the first collaboration between Otto Steidle and myself. It was a

⁵²¹ Interview, entitled 'The alternative to the city ...is the city' was shown in conjunction with Otto Steidle's installation 'The Nomad's Tower' at the 7th Architecture Biennale in Venice, 2000. For full transcript of interview see APPENDIX A

⁵²² *Architectural* was first shown at the *Architektur Galerie* in Munich and it is this particular exhibition that will be analysed here. However, after this first stage, the exhibition was further shown in Salzburg (*Architectural; Berchthold Villa*; 11 – 26 July 1994) and, in slightly different presentation form in Venice (*Architectural - Fra Architettura e Fotografia; Fondazione Masieri*; 10 September – 14 October 1994). The exhibition got then further developed and integrated into larger exhibitions in Paris (*Fenêtre sur cour; Institut français d'architecture*; 01 December 1994 – 28 January 1995) and Berlin (*Universität Ulm und andere Wohnbauten; Aedes East*; 14 August – 10 September 1995)

collaboration that led to a sequence of further exhibitions, the editing of another monograph on Otto Steidle⁵²³ as well as the continuous consultancy role for architectural projects within the practice Steidle+Partner. For the publication and exhibition project *Architectural I* acted as editor for the book (in collaboration with von Gagern and Steidle) and was exhibition curator (with von Gagern) and exhibition designer.

⁵²³ KOSSAK, Florian (ed.) (1994). *Bewohnbare Bauten/Structures for Living*. Artemis: Zurich

Subjects of the exhibition

Who are the primary producers?

In the case of *Architectural* one has to first describe here Otto Steidle, the architect, as well as Verena von Gagern, the photographer, as they had both established a symbiotic working relationship for this exhibition, as indeed for the book *Architectural* that was produced in conjunction with the exhibition. The role of the curator and exhibition designer that was taken on by the author of this thesis shall only be mentioned briefly here at the end of this section.

Otto Steidle (1943-2004)⁵²⁴ was with no doubt one of the most influential German architects since the 1970, who, as Wilfried Nerdinger the director of the Architecture Museum in Munich puts it 'had shown for decades new paths to be taken in buildings to work and live in'⁵²⁵ [author's translation]. While many pivotal architects exercise their influence, at least partly, through theorising and writing, Otto Steidle was an architect who believed in architectural experimentation and progression through the act of building. Yet he would 'build in this world without following a superordinate end, also without the belief in the bettering or the progress of this world. ... [he rather followed] the impetus of [his] own work or, even more so, the inducement of the possibilities and tasks that [he would] encounter and search for'⁵²⁶ [author's translation]. The buildings that resulted from this work were, as Nerdinger puts it, 'characterized by a rational conception that does not occupy and determine all spaces of life but consciously allows room for [individual and collective] expression'⁵²⁷; buildings, that had 'always a past and

⁵²⁴ For a concise curriculum vitae and a complete project list see: www.steidle-architekten.de

⁵²⁵ NERDINGER, Wilfried (2003) 'Otto Steidle – Land-Stadt-Haus', Press Text for the exhibition *Otto Steidle – Land-Stadt-Haus*, Architekturmuseum der Technischen Universität München in der Pinakothek der Moderne. 20.11.2003 - 21.03.2004
sourced: <http://www.architekturmuseum.de/ausstellungen/detail.php?which=47> [Last accessed: 16.06.2008]
[Otto Steidle [...hat] mit Bauten für Wohnen und Arbeiten seit Jahrzehnten immer wieder neue Wege aufgezeigt [...].]

⁵²⁶ STEIDLE, Otto (2003). *Land, Stadt, Haus*. Architekturmuseum der TU München: Munich. p11
[Ich baue an einer Welt nicht nach einem übergeordneten Ziel und auch nicht aus einem Glauben an die Verbesserung und den Fortschritt der Welt. ... Ich folge dem Anstoß meiner Arbeit, mehr noch dem Antrieb aus dem mir begehrenden und von mir gesuchten Möglichkeiten und Aufgaben.]

⁵²⁷ NERDINGER, Wilfried (2003). "'Die wirklich groß geplanten Werke sind unfertig' – Zur Architektur von Otto Steidle" in: STEIDLE, Otto (2003). *Land, Stadt, Haus*. Architekturmuseum der TU München: Munich. p7/8
[... bis heute ist Steidles Arbeit [durch folgende Grundhaltung] bestimmt: eine rational Planung, die nicht determinierend alle Lebensräume besetzt, sondern bewusst Freiräume offen hält [...].]

a future, that are alive' as Patrice Goulet writes⁵²⁸ [author's translations].

The openness to change was one of the central characteristics of Otto Steidle and it is, consequently, a main feature of his architecture. The change is fostered and facilitated through his partly long-lasting, partly temporary collaborations and partnerships with befriended architects or artists as well as his office staff and his students. While he always constituted the driving force or guiding factor within these collaborations, this, sometime cross-disciplinary, often cross-ideological, exchange was nevertheless of fundamental importance in the development and execution of his projects and buildings.

One of these continuous, crucial exchanges and work collaborations was indeed with his wife, the photographer Verena von Gagern. Although originally trained as an architect, von Gagern has practiced for the last three decades as an artist-photographer⁵²⁹. Her migration between architecture and photography is probably best expressed through an essay title from 1987 'Vom Sehen der Architektur zur Architektur des Sehens'⁵³⁰ [From Seeing Architecture to the Architecture of Seeing]. And although architecture was throughout the years a topic of interest within her photography – the work with space, with architectural space, with light and perspective – her exchange with Steidle was not coming from an architectural perspective but from that of another visual art discipline. It is this visual culture, the architecture of seeing that should also become crucial in von Gagern's and Steidle's collaboration of *Architectural*.

As mentioned already above, *Architectural* was curated by the author in conjunction with Verena von Gagern who supervised the hanging of the photographs and Otto Steidle who was consulted on the selection of models and sketches that were used in the exhibition. Prior to the collaboration on the exhibition *Architectural*, the author, von Gagern and Steidle had developed and produced the book *Architectural*.

Architectural constituted the author's first project with Otto Steidle. It was also the first

⁵²⁸ GOULET, Patrice (1994), 'Fenêtre sur Cour' in: GOULET (1994). *Fenêtre sur Cour*. Ifa: Paris. p15

[Otto Steidle a évidemment choisi son camp. L'accadémisme, qu'il soit historique ou modern, ne le concern pas. Ses projets ont toujours un passé et un avenir: ils sont vivants.]

⁵²⁹ She has exhibited widely throughout Europe, both in solo- and group exhibitions, authored and edited several books and taught photography for many years at schools in Europe and the USA.

⁵³⁰ VON GAGERN, Verena (1987). 'Vom Sehen der Architektur zur Architektur des Sehens', *Bauwelt* No. 1-2, 1987.

exhibition that the author curated for another architect, having previously only 'curated' exhibitions of own work in conjunction with other students. As such *Architectural* provided the first possibility to experiment with curatorial aspects of presenting someone else's work as well as to get acquainted with organizational aspects of an exhibition. *Architectural* had no additional exhibition designer but the exhibition design, or rather the exhibition arrangement, had also been conceived by the author in co-operation with Verena von Gagern and consultation with Otto Steidle. Verena von Gagern was here particularly instrumental in the composition of the picture wall that followed a traditional 'Salons-Hanging' [See Figure 55].

Who are the secondary producers?

The audience of *Architectural* was, less by intention than by default, a predominantly professional or 'initiated' audience. This was partly due to the location of the exhibition venue, the *Architekturgalerie München*, which is accessed through the specialist architecture and design bookshop *Werner*. The gallery has no street front and therefore no 'accidental' passing-by audience. The bookshop acts here almost as a 'filter' or barrier to the gallery. On the other hand, the bookshop also attracts a, largely professional, audience to the gallery who might combine the visit to the bookshop with a visit to the gallery and who might otherwise not have gone out just visiting a particular exhibition.

There was no intended direct involvement of the audience in the production of the exhibition or indeed in conduction of an exhibition experiment. The audience is not 'needed' for the form of experiment that is conducted in this exhibition, as it is exclusively an experiment between artist and architect that is facilitated through the curator.

However, indirectly, the audience plays (as in almost all exhibitions) a role in the completion of the exhibition through the production of meaning on behalf of the recipient. In this particular exhibition, the audience had to discover for themselves the relation between the photographs, between the pictures and the depicted architecture. The audience was invited to engage with a different way of viewing and presenting architecture⁵³¹. The exhibition's perception and reception was thus a very personal experience without a prescribed guideline given by the exhibitors.

⁵³¹ Omission of usual project information; pictures not ordered according to projects but photographic relations; hanging or presentation order of pictures that favoured the relational aspects of the objects, not their autonomous qualities.

Object of the exhibition

What is the exhibition topic / nature of the emerging architecture?

Architectural presented work of the Munich based architect Otto Steidle through the photography of his wife Verena von Gagern, yet as Dorothea Parker wrote in the *Bauwelt*, these photographs were 'at the same time the actual exhibition objects'⁵³² [author's translation]. Verena von Gagern has called *Architectural* 'an encounter between two creative, independent visual languages free of mutual intentions' in which 'the pictorial result, the artistic reply to the other, necessarily has a critical quality for both'⁵³³. On a general level it was thus the relation between architecture and photography, between two artistic disciplines and its media that acted as an overarching topic for the exhibition. More specifically it was the very personal perception and interpretation of Steidle's architecture through von Gagern's photography.

Inherently, through the means of von Gagern's photography as well as a collection of models, the exhibition could also be read as the presentation of a number of buildings and projects by Otto Steidle's practice, giving an overview of Steidle's oeuvre from the early 1970s to the mid-1990s. Among these were the residential buildings *Genter Strasse* in Munich, *Elementa* and the *Kreuzgassenviertel* in Nuremberg, the *IBZ* and the *Seniorenwohnhaus* Berlin, and *Wienerberggründe* in Vienna; the publishing house *Gruner + Jahr* in Hamburg; the *University West* in Ulm; as well as Steidle and von Gagern's farm in Lower Bavaria. Among the projects presented through sketches and models were also a number of master plan competitions such as *Potsdamer Platz* in Berlin⁵³⁴.

As for the exhibition's understanding of architecture one can assert that the exhibition presents and tests architecture as an intellectual and, more importantly, artistic construct which is based on the work and perception of architecture as material reality as well as societal process. Von Gagern underlines the artistic perception and intellectualization of architecture when she writes about her approach to architecture: 'When I think of architecture, I have in mind the whole world which fills it. In the present, the great area of conception, from sketches to construction studies, drawing

⁵³² PARKER (1993). p2465

[*Die Münchner Architekturgalerie stellt zur Zeit Fotos aus, die das Werk eines Architekten zeigen und dabei selbst Ausstellungsgegenstand sind ...*]

⁵³³ VON GAGERN (1993). p9

⁵³⁴ However, no labels indicated which project was actually shown in each photograph or sketch

models, execution ... [...] And this brings me to architecture as thought, as an idea, imagination, theory, or history, and architecture as an artistic construction which – somewhere between and with these ideal and material manifestations – has just departed from the abstractness of the term itself⁵³⁵. And on the relation between architecture and photography she then continues: 'When I look at architecture through photography or vice versa, they turn to face each other in a fictitious intermediate zone of light, time, and space and grant each other lives of their own'⁵³⁶.

But it is also the exhibition set up itself that promotes this understanding of architecture as intellectual construct or, as Latour calls it, a 'thought experiment'. According to Latour, thought experiments 'invent laboratory conditions before the laboratory can be built'⁵³⁷. One can argue that Verena von Gagern's endeavour to engage with Otto Steidle's architecture through her own medium, photography, is such an invented 'thought experiment' or 'invented laboratory condition' before the 'built laboratory', before the spatially confined exhibition in the gallery. And the 'thought experiment' then continues through the perception of the exhibition, both by Otto Steidle, who uses this experiment to gain insight in his own work, and by the general exhibition audience who produces their own meaning.

It should be stressed here that, while not an explicit topic of the exhibition, the understanding of architecture as societal process, or as enabler of social activity and relations is however a very strong aspect within Otto Steidle's architectural understanding and approach. This is a notion that has been, time and again, described by numerous architectural critics and writers. Gottfried Knapp for instance writes that 'already with his first architectural mark [the houses in Genter Strasse], Steidle presented in an incredible clarity the dictum of his future production: not architecture should determine the forms of life that occur in it, NO, life itself has to determine the forms in which architecture indulges'⁵³⁸ [author's translation]. Manfred

⁵³⁵ Ibid. p10

⁵³⁶ Ibid.

⁵³⁷ LATOUR, Bruno (2004) "Gedankenaustellung" the "Weibelian tradition" in: *Liebesgrüsse aus Odessa Für Peter Weibel*. Merve Verlag: Berlin. pp127–129
also: <http://www.bruno-latour.fr/poparticles/poparticle/P%20109-WEIBEL.html> [Last accessed: 16.06.2008]

⁵³⁸ KNAPP, Gottfried (2004) 'Zum Tod von Otto Steidle - Die hohe Kunst des Wohnens'. *Süddeutsche Zeitung*, 01.03.2004
Sourced from: <http://www.sueddeutsche.de/immobilien/geldmarkt/artikel/574/27547/print.html>
[Last accessed: 16.06.2008]
[Gleich mit seiner ersten architektonischen Setzung führte Steidle also in unerhörter Klarheit eine Maxime seines künftigen Schaffens vor: Nicht die Architektur darf die Formen des Lebens,

Sack writes that ' [...] the ideas of '68 are resounding in Otto Steidle's work [...] He has got the vision of an "architectonical image" that derives from our social relations, an image, that is "a blueprint of a society, which is directed into the future"'⁵³⁹ [author's translation]. And finally, Wilfried Nerdinger, director of the *Architekturmuseum der Technischen Universität München*, writes that Otto Steidle's 'architecture provides possibilities for the individual, "democratic" occupation of spaces'⁵⁴⁰ [author's translation].

What is the architectural research that is conducted through the exhibition?

Verena von Gagern has called *Architectural* 'an encounter between two creative, independent visual languages free of mutual intentions' in which 'the pictorial result, the artistic reply to the other, necessarily has a critical quality for both'⁵⁴¹. This quality of a critical mirror function is something that Otto Steidle also searched outside the exhibition context, in his day-to-day architectural praxis where he 'needs the feedback from others, from people who can fill out, even interpret, his sketched ideas. Then, like an outsider, he can react to his own ideas, and continue to define them further through new sketches'⁵⁴² [author's translation]. In *Architectural* this exchange, this interpretation from 'outside' in order to allow a progression in the own work doesn't happen through the normal drawing and model making process of the architectural practice but through a 'foreign' artistic medium, - photography.

Yet it was crucial that the photography of Verena von Gagern as well as the presentation of the actual pictures in the gallery did not follow the usual quasi-objective representational approach of architectural photography or the use of photography merely to illustrate an architectural project within the exhibition. Von Gagern speaks here of 'combining criticism with affection' which creates a vividness 'when it is not

die sich in ihr ereignen, bestimmen, nein, das Leben muss die Formen bestimmen, in denen sich die Architektur ergeht.]

⁵³⁹ SACK, Manfred (1985) 'Ordnung mit unordentlichen Entwürfen' in: CONRADS, Ulrich and SACK, Manfred (1985). *Otto Steidle*. Reissbrett 3, Schriftenreihe der Bauwelt. Vieweg: Braunschweig/Wiesbaden. p9
[Immer wieder schlagen die 68er bei Otto Steidle durch. ... Er hat die Vision von einem von sozialen Beziehungen abgeleiteten "architektonischem Bild", das "ein in die Zukunft gerichteter Entwurf einer Gesellschaft" sei.]

⁵⁴⁰ NERDINGER (2003)
[Seine Architektur liefert Angebote zur individuellen, "demokratischen" Besetzung von Räumen.]

⁵⁴¹ VON GAGERN (1993). p9

⁵⁴² KOSSAK (1994). p9

written as a distance-creating analysis in a language foreign to its object' (as, one might say, it is common in traditional architectural photography)⁵⁴³. The individual photography thus conveys something of the featured architecture that goes beyond the supposedly objective representation. The individual photography is rather a critical but affectionate interpretation of the perceived architectural, and photographic, qualities of a specific building.

In their grouping, as sequence within the book but even more so as cluster on the gallery wall, these pictures then reveal a decisive additional experimental layer. By combining and arranging them according to photographic, not architectural, criteria a whole set of new relations, references and readings of the depicted architecture and its qualities becomes visible. It is particularly this aspects that manifests the research and experiment which was of relevance to Otto Steidle and his own work, namely to clarify and verify his own architectural ideas. The view on his architecture by Verena von Gagern opens insights in his own work that could have otherwise not been achieved.

Processes and form of the exhibition

How is the exhibition 'set-up' in order to provide the testing ground for the architectural research?

In relation to the architectural experiment we are here predominately concerned with the photography part of the exhibition. Although the models formed without doubt a crucial part in the overall public presentation of Otto Steidle's architecture through this exhibition, this part did not undergo a similar 'thought experiment' prior to the exhibition as did the photography part. Furthermore, the models, although usually not kept in this amassed manner, had been constantly visible within the studio of Otto Steidle prior to the exhibition. Therefore they formed not a new reference system for Otto Steidle nor did they convey relations between each other that could not have been made before in the studio. However, to the exhibition audience the arrangement of the models would have presented a similar challenge than the photography as both followed similar arrangement principles of new, non-project related relations.

The exhibition space of the *Architekturgalerie München* is divided into two separate rooms; one long and narrow room with one long white wall and opposite large floor-to-ceiling windows facing onto a courtyard; one small and almost square room in with no

⁵⁴³ VON GAGERN (1993). p9

artificial light. One enters first the long room from the aforementioned bookshop. The square room is in line with the first one and connected through a small anteroom.

The set-up for *Architectural* followed two very simple spatial moves. The reference points of the exhibition's arrangement were the so-called '*Petersburger Hängung*' and Pannini's painting '*Roma Antica*' where the walls and floors are almost completely occupied by pictures and artefacts [see Figure 55]. Translated into the exhibition concept of *Architectural* this meant that in the first room, only the long wall and, in the second room, only the floor were occupied with exhibits. The wall in the first room was covered almost from side to side, from floor to ceiling with framed photographs by Verena von Gagern and several identically framed sketches by Otto Steidle. The second room featured a collection of architectural models from Otto Steidle's practice, all in different scales, working models as well as final presentation models, that were all crowded together on a landscape of old tobacco boxes that acted as pedestals.

As described above, the first 'thought experiment' was already conducted through Verena von Gagern by photographing and thus interpreting her husband's, Otto Steidle's, architecture. The second experiment, this time as a 'built laboratory', happens through the peculiar hanging of von Gagern's photographic pictures (and some interspersed sketches by Otto Steidle) on the long wall of the gallery. There existed two different sizes of photographs and three different sizes of frames. However, all black and white photographs were printed in the original square format of the negative without any cropping. The majority of pictures were presented in a portrait-format frame with a spacious, white passepartout or photomount. Otherwise the pictures, small or large size, would stretch to the cherry-wood frame.

Within the whole wall presentations certain smaller group arrangements of photographically related pictures were made: rows and columns of three to five pictures, pairs or groups of two-by-two, here and there an individual picture to produce a counter-point. Related pictures were hung with a minimal distance to one another, otherwise a gap of no more than 15 cm allowed for a continuum within the entire picture wall. All this followed an underlying complex hanging grid that produced spatial relations (and consequently thought relations) between pictures and picture groups over the length of the whole wall. [See Figure 56]

Most importantly, however, was the already mentioned rationale behind the grouping and arrangement of the photographs on the wall. It did not follow a conventional architectural order or one that one would expect from an architecture gallery, - namely

the arrangement according to projects or buildings or at least overtly architectural themes (such as structure, claddings, openings etc). The pictures were ordered according to photographic themes such as light and darkness, texture, perspective, depth and surface etc. In this way, the photographer's arrangement of pictures grouped buildings, and implicitly architectural themes, together that architects, and here Otto Steidle in particular, would not have seen together thus creating a new understanding of the presented architecture.

How are various media used in order to materialize, test and mediate architectural propositions?

The key means of architectural experimentation and inherently the presentation of an architectural proposition were the approximately eighty black and white photographic pictures by Verena von Gagern in combination with the aforementioned photographic way of ordering or arranging these pictures in a '*Petersburger Hängung*'. Shown in direct conjunction with these photographs the exhibition presented approximately twenty colour sketches by Otto Steidle. Photographs and sketches were framed in the same way. Both had no additional information presented with them. They were further not grouped or arranged according to certain projects (i.e. a sketch of Gruner+Jahr together with a photograph of Gruner+Jahr).

In the second room a collection of approximately twenty models from the studio of Otto Steidle were presented on a 'landscape' of re-used tobacco boxes. The models presented varied from very rough working models to presentation models, and from a scale of 1:2000 urban masterplan models to a 1:1 section of a window. As with the pictures the models were not arranged according to certain project groups or scales. It was rather anticipated that inherent architectural and structural relations between an urban model and a 1:20 construction model would become apparent. There were however, in difference to the picture wall, references to the projects or buildings for each model through the presentation of a series of Polaroids with captions along the wall that surrounded the model landscape. Apart from the above-mentioned minimal references for the models there was no further textual information provided in the exhibition.

It can be argued that von Gagern's pictures evade a clear classification as either media of presentation or media of representation. While they are clearly not a medium used in the actual production process of architecture within Steidle's studio, they are nevertheless presenting a reconstructed idea of architecture, or more specifically Otto

Steidle's architecture. In that sense, they are both presentation of architecture as an intellectual and/or artistic construct (by Verena von Gagern) as well as representations of a concrete architectural material (by Otto Steidle). The models on the other hand are clearly media of presentation.

How does the exhibition use its temporality as well as its spatial and economic parameters in order to achieve its ends?

The temporality of the first *Architectural* exhibition was not an issue as the duration of the exhibition did not matter for the architectural experiment⁵⁴⁴. The actual experiment happened at the conception stage and within the first few days of the finished exhibition once the photographs hung in the gallery and had been perceived by Otto Steidle. It was then, that the exhibition set-up could provide the test-bed for a his own architecture. The actual period when this exhibition was then perceived by a wider audience did not add to this process. However, as *Architectural* became a travelling exhibition, transforming from location to location, time or temporality played again some role. Each time an exhibition would be re-mounted new constellation would arise between the photographs or the photographs and implicitly the presented architecture would engage differently with the architectural context of the gallery space.

As for the spatial limitations of the gallery, and its specific room and wall layout, one can first of all state that they have been necessary in order to create the picture wall. It also afforded the creation of a certain intimacy that such an exhibition set up needed. A different spatial configuration might have led to a completely different way of arranging the photographs thus changing the experimental set-up of the exhibition. As mentioned above, *Architectural* travelled to several other locations⁵⁴⁵. Later parts of *Architectural*, predominantly the photographs by Verena von Gagern but also some of the models

⁵⁴⁴ Temporality is of course one aspect of travelling and transforming exhibitions. In this regard the temporality of *Architectural* was a premise for further presentations in Salzburg and Venice and its integration or transformation into the larger exhibitions *Fenetre sur Cour* in Paris or *Universität Ulm und andere Wohnbauten* in Berlin. [See Figure 59 and Figure 60]

⁵⁴⁵ *Architectural* at the *Berchthold Villa* in Salzburg worked with two opposite facing walls, each one shorter than the Munich wall. The space itself had here architecturally also a similar neutrality as the space in Munich. *Architectural* at the *Fondazione Masieri* in contrast had 'to deal' with an architecturally overloaded space designed by Carlo Scarpa. Firstly this produced a certain clash between two very different architectural languages. Secondly, the delicacy of Scarpa's interior with its *stucco lusto* wall also did not allow for the same hanging method as in Munich (simply nails in the white wall) but called for a specially designed hanging device which completely changed the presentation of the photographs.

should become part of other exhibitions that had a slightly different focus⁵⁴⁶.

How do 'elements of uncertainty' or 'risk', incorporated into the exhibition, affect the implementation, perception and result of the exhibition?

All pictures that were selected for the exhibition had been previously arranged in a linear manner for the book *Architectural* where certain pairings or sequences were already tested. However, prior to the exhibition in the *Architekturgalerie München* they had not been arranged together within one installation. The question was thus whether this exhibition would indeed go beyond the book and allow for a multitude of new and different relations and consequently different readings. Would the exhibition bring a new decisive layer to the architectural experiment and lead to additional knowledge? And would the artistic, cross-disciplinary cooperation be able to manifest the already happened 'thought experiment' into a 'built laboratory' that revealed a new insight into Otto Steidle's architecture? As with all exhibition installations these questions could only be tested through the actual putting in place, through the act of installing. Only then, would one be able to judge whether the exhibition was actually achieving its set aims or whether it would just be an exhibition of, extremely beautiful, photographic pictures and enticing sketches.

If one wants to speak of a 'risk' at all then this would concern the question of the actual perception of the exhibition by the audience. It could be argued that this 'risk' did not affect the exhibition or the experiment conducted through it. The risk of was rather with the institution, the *Architekturgalerie München*, than with the producers of the work. The question that arose was whether *Architectural* was indeed an architectural exhibition as the title suggested or would it be seen as a predominantly photographic exhibition shown in foreign territory – an architecture gallery. And, more importantly, would the audience perceive the exhibition as the dialogue between two artists, as the '[...] encounter between two creative, independent visual languages [...]'⁵⁴⁷, as the exhibition's producers had intended. Would they be willing to take part in this very personal encounter and add their own personal perception to the presented work?

Two exemplary exhibition reviews gave slightly different answers to these questions (and this limited sample is of course no real indication how the entire exhibition

⁵⁴⁶ For instance *Fenetre sur Cour* at the IFA in Paris, *Universität Ulm und Andere Wohnbauten* at the Aedes-East Gallery in Berlin, or *Otto Steidle – Projekte und Farbe* in Dresden each incorporated the material in very different ways.

⁵⁴⁷ VON GAGERN (1993). p9

audience perceived the exhibition). While Dorothea Parker states in the *Bauwelt* that 'Architectural [is a] peculiar attribute'⁵⁴⁸ she nevertheless embraces the idea of *Architectural* as an exhibition that presents 'photographic pictures that depict the oeuvre of an architect but are at the same time the actual exhibition objects'⁵⁴⁹. The architectural critic of the Munich daily *Abendzeitung*, Peter M. Bode, on the other hand describes *Architectural* as 'a charming double-show'⁵⁵⁰, thus separating the artistic, photographic part and the architectural, model part of the exhibition.

How does the exhibition form an integral and critical part of the architectural praxis?

The exhibition served as a reflection for Otto Steidle's own architectural practice. Consequently, this led to a new and possibly refined view on, or perception of, his own work, thus influencing future architectural projects. The exhibition produced thus a certain 'mirror – process' that would happen in less explicit forms also in the normal architectural practice. The exhibition presented the chance to formalize, theorize and publicize this process.

For Verena von Gagern, photography is clearly her artistic praxis. Exhibiting her photography in a gallery is, beside the publication in books, the major form of publicly presenting the work.

Typological context of the exhibition

How does the exhibition fit into the typological categorisation of Laboratory Exhibitions as explored in PART II?

Architectural fits both in the category of the 'Curated Laboratory' as well as, to a lesser extent, in the category of the laboratory as a 'Place of Architectural Production'. It has been stated in Chapter 6 that the experimental notion of the exhibition in the 'Curated Laboratory' is less produced through the primary production of architectural media and propositions but through the curation of such material. Through the curatorial process

⁵⁴⁸ PARKER (1993). p2465
[*Architectural, seltsame Eigenschaft*]

⁵⁴⁹ Ibid.
[*Die Münchner Architekturgalerie stellt zur Zeit Fotos aus, die das Werk eines Architekten zeigen und dabei selbst Ausstellungsgegenstand sind ...*]

⁵⁵⁰ BODE, Peter M. (1993) 'Die Ästhetik des Filigranen' in: *Abendzeitung*, 29.11.93
[*... reizvolle Doppel-Schau ...*]

of selecting von Gagern's photographs and the arrangement according to a specific, 'non-architectural' criteria *Architectural* functioned as a Laboratory Exhibition for Otto Steidle in which he could investigate his own architecture. In that respect, it is the curation of the architectural media, the photographs as well as the sketches and models, that experimented with architecture and in effect produced new architecture. It is this latter point that indicates already the overlap with the exhibition as a 'Place of Architectural Production'. However, one would have to note here that this production only took place in the actual installation or setting up process of the exhibition and the first perception through its producers. In contrast to 'Places of Architectural Production' as they have been described with the *Museion*, the Academies, or the Architect's Studio, the producers were not present after the opening of the exhibition and the architectural production process was not further bound to the locale of the exhibition.

How do historical precedents such as the described studiolo, Kunstkammer, cabinet de curiosité, museum, academy, studio, world exposition, building exhibition, installation, or elements thereof, relate to this specific exhibition?

One can argue that the very personal, almost intimate presentation of Steidle's architecture through von Gagern's photography according to an ordering system that does not follow any prescribed professional canon is somewhat alike to the creation of a personal cosmos as it can be found in the 16th century *Kunstkammer* or the 17th and 18th century *cabinet de curiosité*. One is reminded here of Pomian's characterisation of the *Kunst-* and *Wunderkammer* that constructed 'a universe [...] where every question could legitimately be posed. [...] it was a universe to which corresponded a curiosity no longer controlled by theology and not yet controlled by science [...]'⁵⁵¹.

It can further be argued that the way in which pictures and models were presented in *Architectural* followed pre-Modern principles both in terms of the formal arrangements as well as in the lack of any classification system⁵⁵². There is hence a resemblance to the exhibitions in *Kunstkammern*, *cabinets de curiosités* but also 17th to 19th century *Salons* exhibitions⁵⁵³ or galleries such as the one depicted in Pannini's *Roma Antica*.

⁵⁵¹ POMIAN (1990). pp77-78. Cited in BENNETT (1995). p40

⁵⁵² It is interesting to note here that Herzog & De Meuron's exhibition *No.250 (Schaulager, NAI, Tate Modern)*, although following on the one hand a similar formal presentation technique by amassing working models on tabletops or 'plastering' walls with shots of building sites, it introduces a (pseudo-?) categorisation system that locates the exhibition deliberately in a Modern museum tradition.

⁵⁵³ See for instance the painting *Exposition au Salon du Louvre En 1787* by Piero Antonio Martini

A post card depicting Pannini's *Roma Antica* version that hangs in the *Staatsgalerie* in Stuttgart acted as first reference within the discussion between the author and Verena von Gagern about the exhibition set up and was forthwith s guide in the development of the exhibition. It was here in particular the arrangement of the approximately sixty *veduti* of Roman ruins that are hung from bottom to ceiling of the depicted gallery as well as the 'arbitrary' scattering of artefacts on the ground that acted as guides for the formal exhibition concept. Furthermore, the spatial de- and recontextualisation of Roman ruins that happens in Pannini's painting by placing formerly unconnected buildings and places next to one another on the gallery wall is a similar technique then the one applied in *Architectural*⁵⁵⁴.

Another tradition in which this exhibition stands, and which has not been specifically been described in PART II, is that of the photographic exhibition. Photographic exhibitions go as far back as 1839 when William Henry Fox Talbot exhibited his first photographs at the *Royal Institution* in London⁵⁵⁵. As architecture (both historical as well as new constructions) was indeed one of the main topics of early photography it can be assumed that this and other early photography exhibitions were also presenting pictures of architecture⁵⁵⁶. However, this would concern only the use of a new medium through which architecture is represented in a gallery. The decisive step towards an experimental praxis and in that respect the link to this exhibition is made through avant-garde artists including, Rodchenko or Moholy-Nagy, who used the medium photography to interpret their colleagues' architecture. Key words are here new compositions, play of light and shadow, or unusual perspectives. One could argue that the photographer or artist takes here the role critic who transforms and produces architecture through reflection⁵⁵⁷. This process is similar to the experimental work relationship between von Gagern and Steidle in *Architectural*.

⁵⁵⁴ One is also reminded of the photograph from 1950 showing André Malraux amidst some hundred photographic pictures that are arranged out on his office floor in preparation of his *Musée imaginaire*

⁵⁵⁵ see: 'Photographic Exhibitions in Britain 1839 – 1865', research data base on <http://peib.dmu.ac.uk/index.php>
or: TAYLOR, Roger (2002). *Photographs exhibited in Britain 1839-1865*. National Gallery of Canada: Ottawa

⁵⁵⁶ see: PARE, Richard (1982). *Photography and Architecture: 1839 – 1939*. CCA: Montreal
There exists, however, only very scattered information about the content of these exhibitions and even less or no information about the way these photographs were presented.

⁵⁵⁷ Avant-garde photography had thus a tremendous influence of modern architecture, - and some, like Beatriz Colomina for instance, would argue to such an extent that architecture was indeed designed with its photographic image in mind.



Figure 55: Giovanni Paolo Pannini, Roma Antica, 1754/1757.



Figure 56: Architectural, long wall of photographs in 'Petersburger Hängung' at the Architekturgalerie, Munich

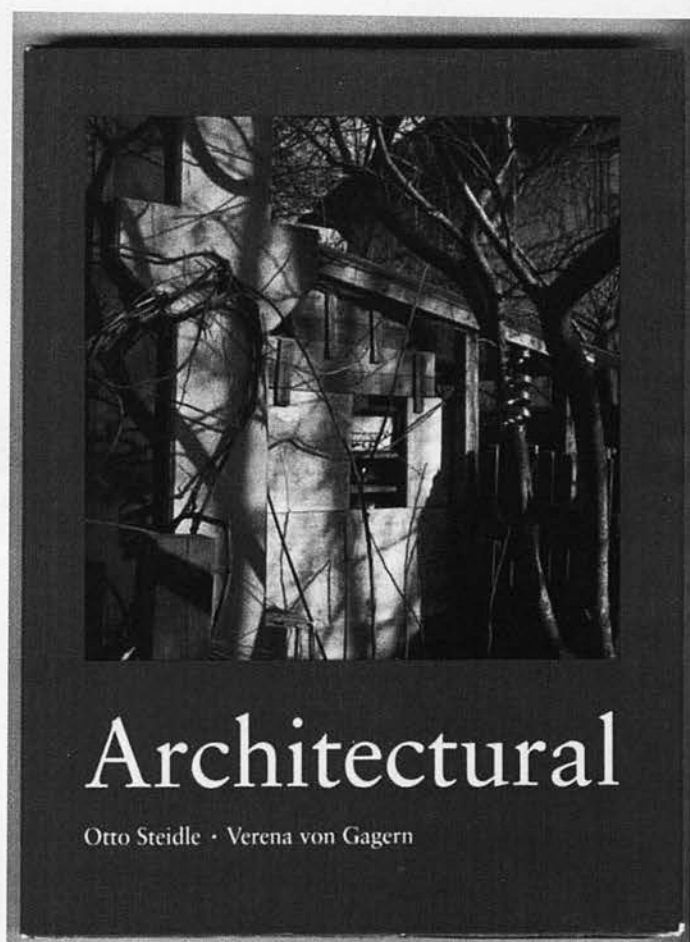


Figure 57: Architectural - cover of the book Architectural published by Nazraeli Press

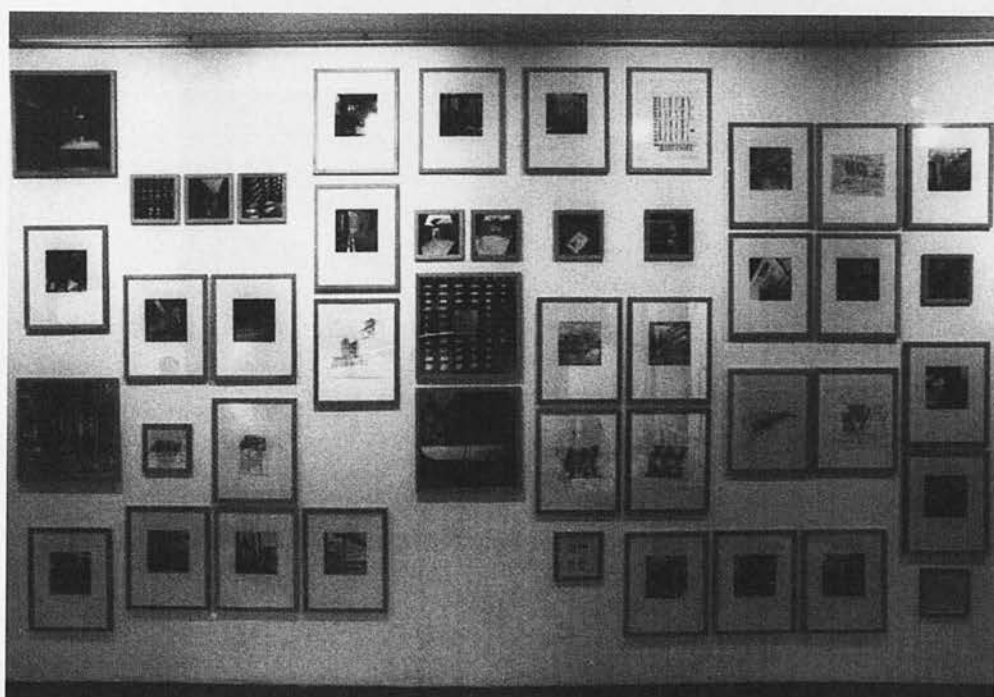


Figure 58: Architectural - detail of the long wall of photographs and sketches

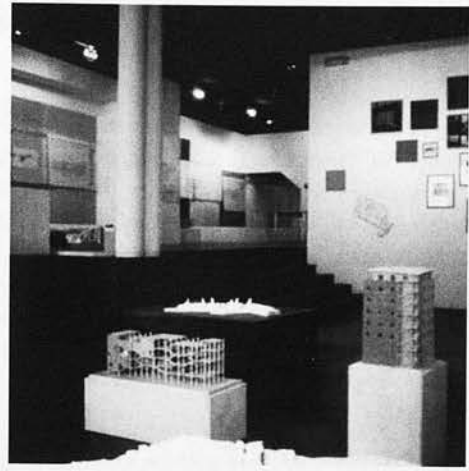


Figure 59: Fenetre sur Cour at the Institut Français d'Architecture, Paris, 1994. The exhibition Architectural got submerged here into a much larger monographic exhibition with a much wider range of media used.

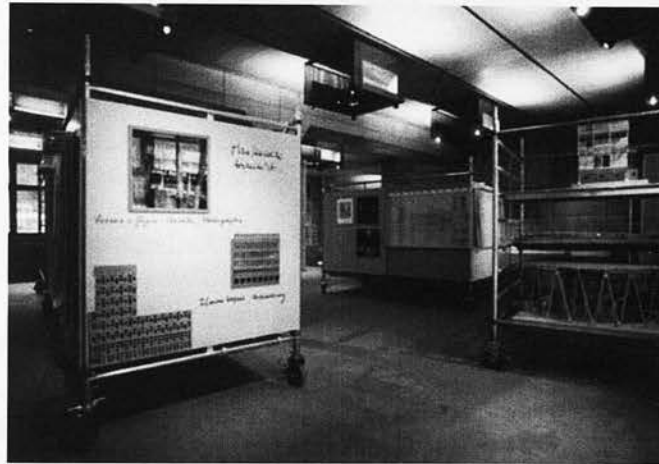


Figure 60: Universität Ulm und Andere Wohnbauten at the Aedes East Gallery in Berlin, 1995. In this exhibition the Architectural and Fenetre sur cour material was again used but rearranged and presented through movable scaffolds.

CHAPTER 10 – Traumhaus 2000 – Participatory Production of an Exhibition

The role of contemporary art is to provoke, stimulate, encourage, or seduce two or more individuals to have a conversation, which will provoke, stimulate, encourage, or seduce two or more individuals to have a conversation, which will provoke, stimulate, encourage, or seduce two or more individuals to have a conversation, which will provoke, stimulate, encourage, or seduce two or more individuals to have a conversation, which will ...

Douglas Gordon [author's translation]⁵⁵⁸

While inviting the audience to actively participate, the artists of the participatory projects create certain interfaces that are well prepared in advance and highly contextualised in a certain social, cultural and political environment.

Suzana Milevska⁵⁵⁹

Exhibition data:

Exhibition Title:	<i>Traumhaus 2000 – Agentur für Wohnwünsche</i> Dreamhome 2000 – Agency for Living Desires
Architect(s):	<i>Architekturklasse Steidle, Aufbaustudiengang Architektur und Städtebau der Akademie der Bildenden Künste München /</i> Architecture Studio Steidle, Postgraduate course in architecture and urban design at the Academy of Fine Arts Munich. Dominik Bröllos, Franz Damm, Ralf Gamböck, Trixi Gruber, Romy Hornschuh, Marco Hölzel, Annett Hoffmann, Sophia Karagiannaki, Hauke Möller, Rocio Ormeno Blanco, Wieland Petzoldt, Vladimir Surovkin, Rolf Teloh, Thorsten Werner
Curator:	Florian Kossak
Exhibition Designer:	Florian Kossak with Tatjana Schneider and Architekturklasse
Others involved:	exhibition audience, numerous invited guest speakers
Exhibition Date (s):	19 – 29 January 2000
Exhibition Venue(s):	<i>AkademieGalerie</i> , Underground Station 'Universität' Munich
Venue Type:	Institutional Gallery, 'white cube', single space with one full window front to public subway in underground station
Exhibition Sub-type:	Laboratory in Real-Scale; Place of Architectural Production; Curated Laboratory participatory exhibition, studio exhibition
Source material:	
Interview:	-
Press Text:	in German

⁵⁵⁸ Douglas Gordon quoted in MATZNER, Florian (1999). 'Künstlerumfrage' in: METZEL, Olaf (ed.). *Basisarbeit*. Akademie der Bildenden Künste München: Munich. pp182-83

⁵⁵⁹ MILEVSKA, Suzana (2006). 'Participatory Art - A Paradigm Shift from Objects to Subjects'. In: *Springerin* 02/06.

- Catalogue: -
- Web Site: www.traum-haus-2000.de / No longer functional
- Key References: DAMM, F., KARAGIANNAKI, S., WERNER, T., (eds), (2001) *Aufbaustudiengang Architektur und Städtebau - Jahrbuch 1998-2001*, Akademie der Bildenden Künste München: Munich
 KASSNER, Franka, MATZNER, Florian, TEZMEN-SIEGEL, Jutta (eds) (2005). *Restrisiko – AkademieGalerie 1999-2004*. AdBK München: Munich.
- Author's Involvement: At the time of *Traumhaus 2000* I was assistant to Prof. Otto Steidle at the post-graduate course in architecture and urbanism (or *Architekturklasse*) of the Academy of Fine Art. In this role I developed the exhibition topic through a series of preparatory theory and design seminars. Furthermore I developed, together with students of the *Architekturklasse*, the concept for the exhibition and was responsible for the exhibition design, again in cooperation with the *Architekturklasse* as well as Tatjana Schneider. During the exhibition I acted as one of the *Traumhaus 2000* agents.

Subjects of the exhibition

Who are the primary producers?

Primary producer of this laboratory exhibition was the *Architekturklasse* of the *Akademie der Bildenden Künste München* (Academy of Fine Arts Munich, short *AdBK*). The *Architekturklasse* is formed by the teachers and students of the two-year-long post-graduate course in architecture and urban design at the *AdBK* that offers graduates of architecture, interior design, planning and landscape architecture the possibility of an intensive consolidation and experimental amelioration of individual design approaches. Like all other art disciplines at the Munich Academy, the postgraduate course in Architecture and Urban Design is also organised in the form of a master class. Between 1993 and 2005, this master class was headed by Professor Otto Steidle.

The work of the *Architekturklasse*, which comprises of approximately 15 students, is mostly studio based. The continuous design work is complemented with theoretical seminars, short workshops and guest lectures. The curriculum changes hereby deliberately between, on the one hand, concrete projects that relate to acute building and planning topics, and on the other hand, fundamental questions regarding the typology, phenomenology, sociology or economy of architecture and urbanism. Core focus of the course is the work on the architectural and urban design.

As an architectural course at an art academy its aim is to create the bridge between the other art disciplines. However, this relation is established through a 'friendly demarcation in the parallel questions and phenomena of the various art disciplines, not in their amalgamation'⁵⁶⁰ [author's translation]. The course guided students in finding their own design approaches and forms of expression that enable them in their creative and critical work on the architectural design. Its intention was to lead them to the creation of new impulses in the development of architecture and urban design. At the time of the *Traumhaus 2000* exhibition the *Architekturklasse* had 14 students with various professional and cultural or national backgrounds.

⁵⁶⁰ STEIDLE, Otto (2001) 'Gedanken zum Verhältnis von Architektur und Kunst' in: DAMM, F., KARAGIANNAKI, S., WERNER, T., (eds), (2001) *Aufbaustudiengang Architektur und Städtebau - Jahrbuch 1998- 2001*, Akademie der Bildenden Künste München: Munich. No pagination [Wir betreiben so die freundliche Grenzziehung zwischen den künstlerischen Medien, nicht ihrer plumpe Vermischung]

As assistant professor of the *Architekturklasse* it was the author's responsibility to curate this exhibition. However, it has to be noted here that the exhibition concept was developed in close exchange and through preparatory seminars with the students of the *Architekturklasse*. Furthermore, it was within the responsibility of individual students or groups of students to develop certain parts of the exhibition, ranging from the conception to organization and execution of these parts (i.e. development of questionnaire, setting up of model workshop, afternoon sessions with school children etc). The exhibition design was also done by the author in conjunction with Tatjana Schneider and the *Architekturklasse*.

Who are the secondary producers?

Traumhaus 2000 was not addressing one particular audience. On the contrary, in order to gather a comprehensive or at least as diverse as possible image of the public's idea about the 'dream home', about their ideas of living in the year 2000, it was important to reach an audience as wide as possible and as diverse as possible. However, one can identify three main groups within this diverse audience that each originate from a different source:

The first, and largest group consisted of passers-by who were using the underground station and who were drawn out of curiosity into the gallery/agency. The location of the underground station in the direct vicinity to the University, the Art Academy, and a mixed business and residential area inevitably determined the composition of this audience, mainly academic and/or middle-class. This group was visiting the gallery mainly during the day.

The second group consisted of people either belonging to the architectural profession or to the Art Academy. The visits by this group weren't as fortuitous as those of the former group but reacted to mailed invitations, advertisement in journals or through posters. It was also an audience that often combined a visit with one of the evening events.

The third group consisted of groups of primary and secondary school children or groups of (non-architectural) students that had been approached prior to the opening of *Traumhaus 2000* and had been invited to participate in an afternoon workshop with the *Architekturklasse*.

While these three groups did not constitute a representative sample of Munich's

population they were nevertheless more heterogeneous than an audience in a traditional art or architectural gallery would be. These diverse groups also presented a large age range spanning from 10-year-olds to pensioners.

Traumhaus 2000 stands in the tradition of participatory exhibitions and the audience had thus a role as veritable, active producers of the exhibition. The audience was integral part of the *Traumhaus 2000* exhibition and indispensable for the creation of the exhibition's content. The gallery/agency and the *Architekturklasse* only provided the locale and framework for the actual exhibition but it was the audience who provided the actual content of the exhibition. The audience was invited to provide information and sketches about their 'dream homes' that they would record on prepared questionnaires. These would then be immediately pinned onto a large yellow wall in the gallery and become part of the emerging and growing exhibition. Additionally, the audience as an integral part in the discussions that took part within the gallery/agency. Without an audience these discussions, important part of the exhibition in the research conducted within it, would not have been possible.

Object of the exhibition

What is the exhibition topic / nature of the emerging architecture

The privately-owned, single detach home has become the most favoured dwelling form in Germany and the Western world. Produced by a growing industry of speculative housing providers, supported by an ideologically motivated tax policies, and supported by a subtle yet persistent propaganda in every visual medium one can witness the erection of ever more housing estates on cheap building land at the fringes of our cities. [...] If architects and planners notice these developments at all then with regret or disdain⁵⁶¹.

The exhibition, and the preparatory theoretical and design seminar sought to challenge and oppose this passive attitude with an investigative and critical praxis. The aim was

⁵⁶¹ Text taken from seminar description *Haus und Heim – Die Produktion einer Mythos*, Architekturklasse, Akademie der Bildenden Künste München, 1999/2000.
[Das Eigenheim ist in der Bundesrepublik ebenso wie in der übrigen Westlichen Welt zur beliebtesten Wohnform geworden. Von einem wachsenden Industriezweig der Fertighaushersteller produziert, von einer politisch motivierten Steuergesetzgebung gefördert und von einer ebenso subtilen wie offensiven Propaganda in allen möglichen visuellen Medien unterstützt, entstehen an den Stadträndern immer neue Siedlungsgebiete in denen auf billigem Bauland Häuser mit so verlockenden Namen wie 'Young Life', 'Maiglöckchen' oder 'Casa Vita' gebaut werden. Wenn diese Entwicklungen von Architekten und Planern überhaupt wahrgenommen werden, dann mit resignativem Bedauern oder abfälligem Desinteresse.]

to examine and document the complexity of the topic in all its various layers, ranging from the historical preconditions to the social and economic impacts, from its construction to its commercialization, from its representation to its emotional perception. With the exhibition, the *Architekturklasse* specifically aimed to investigate whether there exists a wider or more diverse idea about the dream home and the way people want to live than the perpetuated concept of a suburban, single-detach house for the nuclear, patriarchal family⁵⁶².

This already indicates that the exhibition understood architecture as a much as a material reality, an intellectual construct and a societal process. While it can be argued that the deliberation about a 'dream home' on the part of the audience would favour the reading of architecture as an 'intellectual construct' it is actually the 'material reality' which is central here. The 'dream homes' are, although only on paper, always understood as a physical possibility, as a concrete house or building (even if some of the dream homes were clearly fantastic). The intellectual reflection about these 'dream homes' only happened afterwards in the processing of all this information through the *Architekturklasse* through the transferral of the gathered information into architectural a continuous architectural discourse.

The understanding of architecture as 'societal process' is underlined through the process and participatory character of the exhibition. By making part of the architectural production process transparent, by transferring the role of the producer from the architect to the 'user' and thus questioning existing hierarchies, the exhibition constructs and tests architecture as a societal process.

What is the architectural research that is conducted through the exhibition?

The architectural research conducted by the exhibition was threefold:

Firstly, the exhibition was set up to gain knowledge about individual and collective ideas and dreams on housing in order to establish whether the normally perpetuated concept of the suburban, single-detach house for the nuclear, patriarchal family is countered by other social and material models which are currently not expressed. Secondly, the exhibition created an experiment in field and action research that allowed the exhibiting students of the *Architekturklasse* to test new forms of interaction that could ultimately inform their future architectural praxis. Thirdly, the exhibition tested a mode of producing the exhibition through the active participation of the visitors, making the visitors producers and not mere recipients of the exhibition.

⁵⁶² It was estimated in 2000 that Germany would need 1.000.000 new housing units by 2010.

Processes and form of the exhibition

How is the exhibition 'set-up' in order to provide the testing ground for the architectural research?

The exhibition was set up as a 'spoof agency' – the *Agentur für Wohnwünsche* or *Agency for Dwelling Desires* - inviting passers-by to engage with agency members to discuss and document their ideas about the 'dream home'. In order to create this 'spoof agency' the *AkademieGalerie* was equipped with (borrowed) state-of-the-art office furniture including two desks with staff and customer chairs as well as several 'bistro-tables' allowing for either more formal or informal conversations. A 'workshop corner' featured computers and model making equipment such as a hot-wore machine. These elements and additional props like customized pencils or coffee mugs were used to produce a 'professional' atmosphere as well as to allow for an engagement with the audience. In the evening 50 chairs would then transform the gallery/agency space into an auditorium in which the evening lectures were presented.

The back wall of the agency/gallery featured a twelve-meter long pin board, painted in signal-yellow, which should become the carrier for the filled-in questionnaires and sketches produced by the agency visitors. The yellow was used to produce a strong visual impact that would be visible from the outside of the gallery through its large glass wall facing the subway passage of the underground station. Starting from the left hand side the pin-up of the questionnaires and sketches further conveyed the exhibition's intention to finally fill the whole wall with visitor responses. Regular passers-by (i.e. users of the underground) would notice the slow transformation of the gallery and the change of the yellow wall into a 'white wall'.

The working of the exhibition set-up is probably best explained by the announcement on a poster at the entrance to the Agency/gallery that read as follows: 'Please Enter!!! A Warm Welcome to the *Agentur für Wohnwünsche* [*Agency for Dwelling Desires*]. Here at *Traumhaus 2000* [*Dreamhome 2000*] you can get, without any obligation, advice on your aspirations and desires regarding your dream-home. You will receive a questionnaire from our staff of the *Traumhaus 2000* team on which you can note down your individual ideas about living. You can also illustrate these with a little sketch. A member of our team will then be pleased to sit down with you to discuss these ideas further. We will also aim to visualize your ideas by means of drawing, model or computer animation. You are also warmly invited to just have a look around and inform yourself about the different living desires and dream homes that are already exhibited here at *Traumhaus 2000*. We would also like to draw your attention to our

complementary evening lecture series. Please consult the announcements in the agency. We are looking forward to your visit. Your *Traumhaus 2000* team' [author's translation].

How are various media used in order to materialize, test and mediate architectural propositions?

The key feature and means to research as well as to present architectural propositions, namely the ideas of the gallery visitors about the 'dream home', were the questionnaires in conjunction with sketches produced by the gallery visitors.

The questionnaire operated partly with multiple-choice questions but offered also space for longer explorations and answers. It first asked for personal data including profession, marital status, children (or wish for children), sex, age, current form of living (family/shared/single etc). To put the idea of the 'dream home' into an experiential context interviewees were also asked in what kind of dwelling form they were brought up in. The questionnaire then posed questions relating to the 'dream home', asking whether people's 'dream home' would be either a farm, a bungalow, a terraced house, a castle, a ranch, a town house, a villa, a mountain chalet, a skyscraper etc. It further asked for an example of such a dream home that came close to their ideal. The next question related to the environment in which this 'dream home' would be placed, i.e. a forest, an open field, a city, the coast, a village, a metropolis, a hill site, or a suburb. Again, people were further asked whether they were thinking about a specific situation or place.

The third question asked about amenities and infrastructure that should be in their 'dream home's' vicinity. The list included here the workplace, a weekly market, a shopping centre, a supermarket, a church, a library, a kindergarten, a school, a playground, a park, a football ground, a tennis court, a swimming pool, a train station, a bus stop, a motorway, a petrol station, a hospital, a pharmacy, a cinema, and a restaurant. In the fourth questions block people were asked to describe what was particularly ideal (dreamlike) in their 'dream home'. They were here also asked whether they wanted a garden with their house and if yes how they wanted to use it.

A next question asked for what this 'dream home' stood or what was specifically important about it for the interviewee. People could here choose up to three answers from a list including an investment, a retirement insurance, security, a home, a way of self-expression, a hobby, representation, independence, continuity, or freedom. The

economic aspects of the dream house were covered with questions regarding the amount of money the interviewee would be willing to spend for it or on which commodity or leisure activity one would be willing to relinquish to afford such a home.

While the questionnaire allowed only for an expression of the interviewee's ideas about the dream home within the scope of the given questions the additional sheet on which they were asked to sketch or draw their dream home allowed for a much more personal expression of these ideas. Besides this personal visualization of ideas the members of the *Architekturklasse*/Agency offered to 'translate' the sketches and questionnaires into simple models and CAD visualizations that both became additional exhibition material.

How does the exhibition use its temporality as well as its spatial and economic parameters in order to achieve its ends?

The limited time span of the exhibition – two weeks in total – allowed only for a relatively limited number of visitor contacts. In that respect, the research on the 'dream home' did not achieve to collect a big enough sample that would permit to make a generalizing statement on the German dream home in the year 2000. However, participatory exhibitions are relatively staff intensive and the limited time span of the exhibition allowed for a staffing continuity – always 2-4 students of the *Architekturklasse* present – that would not have been possible with a longer run of the exhibition. The short time span also allowed for a very compact combination of agency work and supporting lecture programme leading to a fortuitous relation between both aspects of the exhibition.

In relation to space, the confinement to the gallery were less important – although the spatial provision were near perfect for the intended set-up – than the actual location of the gallery in the very public underground entry level to the underground station '*Universität*'. This allowed for a constant exposure of the agency to a passing public leading to a sustained stream of visitors to the gallery who would.

Economic restraints played only a minor role in this exhibition. The *Akademie der Bildenden Künste* provided the gallery space without charge⁵⁶³. As the whole exhibition was organized within the remit of a study programme there were no cost for staffing of

⁵⁶³ The various classes of the *Akademie* get in turn the opportunity to exhibit in the *AkademieGalerie*. Whether these exhibitions are then solo-, group- or exhibitions by the whole class is to the discretion of the class's professor or/and the students of the class.

the exhibition. All guest lecturers were speaking without fee. The office furniture was provided through sponsorship. Minor costs for the pin board, printing of posters, paint and stationary or model making material was covered by the studio budget of the *Architekturklasse*.

How do 'elements of uncertainty' or 'risk', incorporated into the exhibition, affect the implementation, perception and result of the exhibition?

The main factor of uncertainty was the interaction with the audience and the question whether the audience could be engaged in such a way that they would become the co-producers of the exhibition. While there were parts of the audience that were deliberately targeted (school children invited to workshops for instance) or familiar with the topic and medium through their professional background (architects and *Akademie* members who would predominantly attend the evening programme) a large section of the audience was undefined from the outset as it consisted of passers-by who would enter the gallery/agency out of curiosity. Furthermore, the questionnaire was untested prior to the exhibition and it was therefore not clear whether the audience would be willing to engage with these questions or whether the questions would indeed lead to any meaningful discourse⁵⁶⁴. The question was also whether the audience would feel comfortable with the medium of the sketch to mediate their ideas about the 'dream home'. Neither of these elements of uncertainty was deliberately installed. However, the *Architekturklasse* and the curator were aware of them and saw them as part of the experimental work that was conducted through the exhibition.

The risk, as in every participatory exhibition, was the amount of control over the outcome or end product given away on the part of the curator or exhibitor – the *Architekturklasse* – into the hand of the audience. This is in contrast to a conventional exhibition that would open with the finished installation containing 'finished' art works, artefacts or a premeditated message and remain in this material state until its closing, which doesn't mean that meaning is not produced by the visitor through the process of perception and reflection, hence altering the exhibit on a metaphysical or conceptual level.

On a concrete level the 'risks' were issues or questions like: Would the audience

⁵⁶⁴ It proved that the questionnaires were less useful as a means of a quantitative analysis of the visitors' ideas about an ideal dwelling, their dream home. But that was probably never been its main purpose. And while this data analysis was done after the exhibition it had, as a statistic, only limited significance and explanatory power, - one major reason being the too limited sample of 167 questionnaires.

understand or acknowledge the spoof aspect agency? And would this rather rebuff them or make them curious and wanting to still engage with exhibition? Would the audience spend enough time in the agency engage in a conversation, to fill in questionnaires, and to make sketches? And would there be enough filled-in questionnaires to cover the yellow wall and 'finish the exhibition' as it was anticipated from the outset. All these last questions proved in the end to unsubstantiated worries.

How does the exhibition form an integral and critical part of the architectural praxis?

The exhibition was part of the ongoing educational praxis of the *Architekturklasse* of the *Akademie* and such integral part of the architectural praxis. The exhibition was embedded in a sequence of educational steps leading from a theoretical seminar to design exercises in the studio and finally to competition entries for the 2000 *Venice Architecture Biennale*, all dealing with the topic of the detached house and its implication for the city of the 3rd millennium⁵⁶⁵. In this respect, the exhibition presents part of the extended theoretical exploration of the topic through a form of praxis.

The exhibition further tested a specific form of action research for the participatory architectural praxis. As such it was a demonstration that this form of consultation work has its place and relevance in the architectural discourse and architectural praxis. It opened a different strand of architectural praxis to the students of the *Architekturklasse* and offered the 'user' the opportunity to become an active producer in a participatory production process of architecture. Both aspects of an extended architectural praxis are characterised by Blundell-Jones et.al. when they write that '[...] inventing creative processes of participation, both individually and collaboratively, is suggestive of the way that participation leads to an expanded field of architectural practice'⁵⁶⁶.

Typological context of the exhibition

How does the exhibition fit into the typological categorisation of Laboratory Exhibitions as explored in PART II?

Traumhaus 2000 can be described as both a 'Place of Architectural Production' and, to a lesser extend, as a 'Laboratory in Real Scale'. *Traumhaus 2000* qualifies as a 'Place

⁵⁶⁵ See here MANDRELLI (2000) pp 178-181; 202-205; 348-351; 474-477

⁵⁶⁶ BLUNDELL-JONES, Peter, PETRESCU, Doina and TILL, Jeremy (2005) 'Introduction' in: BLUNDELL-JONES, PETRESCU, TILL, (eds.) (2005). *Architecture & Participation*. Spon Press: Oxon. pxvi

of Architectural Production' on numerous levels. Firstly, it is the setting up of *Traumhaus 2000* as a (spoof) agency in which the actual content of the exhibition would only be produced during the course of the exhibition. Secondly it is the use of the exhibition to publicly deliberate a specific architectural topic by means of gathering knowledge and discussing this emerging knowledge with the audience as well analysing it amongst the primary producers of the exhibition, the *Architekturklasse*. Thirdly it is the relocation of the 'studio' or teaching and learning environment of the *Architekturklasse* from the Academy into the public realm of a gallery. *Traumhaus 2000* further qualifies as a 'Laboratory in Real Scale' through its 1:1-installation in space in order to conduct an architectural experiment.

How do historical precedents such as the described studiolo, Kunstkammer, cabinet de curiosité, museum, academy, studio, world exposition, building exhibition, installation, or elements thereof, relate to this specific exhibition?

As a 'Place of Architectural Production', *Traumhaus 2000* stands on the one hand in the tradition of the studio exhibition that displays the actual production process of architecture. Although this '*Agentur für Wohnwünsche*' or '*Agency of Living Desires*' did not constitute a 'real' studio it nevertheless staged a temporary workplace in which architecture was deliberated and produced which qualifies it for the inclusion of this exhibition into this category. On the other hand the exhibition relates to the relatively young tradition of participatory exhibitions that engage the audience in a very production process as it has been described in relation to the architectural installation [see here also Chapter 7]. The installation also relates here with its performative aspects as *Traumhaus 2000* was deliberately designed to include the producers, exhibitors/architects as well as audience/general public, into a staged scene in order to 'perform' within the exhibition⁵⁶⁷.

As for the studio aspect of *Traumhaus 2000*, one can distinguish here between two different strands of 'studio exhibitions' that have been present in the recent art and architectural exhibition praxis. On the one hand we have those exhibitions that only represent a studio or workshop without acting as actual workplaces during the course of the exhibition⁵⁶⁸. The work process is here only indirectly visible. It is frozen in time

⁵⁶⁷ Compare with the large-scale installations of the Russian Constructivists which included the mass audience as performer within the installation giving them the dual role of actors and spectators. See Figure 43.

⁵⁶⁸ Examples would be for instance the recreation of Paolozzi's studio in the Edinburgh Dean Gallery, the studio installation of Dieter Roth at the 11th Documenta, or recent exhibitions by Renzo Piano or Herzog&DeMeuron that recreate the ambience of an architectural studio.

and focused on objects rather than acting subjects. This strand has neither a real significance for this specific exhibition, nor for the Laboratory Exhibition in general.

On the other hand we have those exhibitions, and *Traumhaus 2000* was part of this category, where artists or architects take 'residence' within the exhibition and make the production process of their work visible – often with the aim to produce a work which will be the final exhibit of the exhibition⁵⁶⁹. These exhibitions have again a varying degree of interaction between exhibiting artist and public, ranging from pure forms of performative display to forms of intensive exchange and collaboration between artists and public to a degree where these differences are dissolved. It is here where the overlap to the above-mentioned second tradition resides, namely in the participation of the audience.

Participatory exhibitions are an exhibition form that has been, and still is, more prominent in the art discipline than in architecture. While participatory processes have been present in the architectural and planning process for the last 30 years⁵⁷⁰ they are hardly found in the architectural exhibition praxis. In the art praxis, however, the participatory exhibition is part of a tradition of 'counter-cultural use of art space, [that is] observable since the early days of modernism, [and which] has been intensified in the 1970s and again in the late 1980s and early 1990s'⁵⁷¹.

One could argue that El Lissitzky's exhibition spaces in Dresden and Hanover, the *Raum für Konstruktive Kunst* at the International Art Exhibition in 1926 and the *Kabinett der Abstrakten* from 1928 respectively, are already precursors of such exhibitions as they invite the viewer to take a very active role in the perception of the art works and the exhibition rooms. The art works are not only produced by the artist but are altered and completed through the process of their perception. Ultimately this leads to a dissolution of the clear roles for artist and audience. Lissitzky has postulated this approach as early as 1920 when he wrote that 'the private ownership of the creation has to be destroyed as everyone is a creator and there is no reason in a division

⁵⁶⁹ Recent examples here are exhibitions like '*Laboratorium*' from 1999/2000 at the Van Abbe Museum, but also '*Unser Berlin*' by GLAS at the Aedes East Pavilion in Berlin in 2004.

⁵⁷⁰ See here BLUNDELL-JONES, Peter (2005) 'Sixty-eight and after' in: BLUNDELL-JONES, PETRESCU, TILL, (eds.) (2005). *Architecture & Participation*. Spon Press: Oxon. pp127-139

⁵⁷¹ VON OSTEN, Marion (2005) 'Politics beyond the white cube' in: BLUNDELL-JONES, Peter, PETRESCU, Doina and TILL, Jeremy (eds.) (2005). *Architecture & Participation*. Spon Press: Oxon. p209

between artist and non-artist⁵⁷² [author's translation].

However, one has to make a distinction here between exhibition with audience interaction, such as the *Kabinett der Abstrakten*, and those with real audience participation. It is a distinction that also Suzana Milevska stresses when she writes that is 'it important to differentiate between participatory art practices and the much broader term "interaction", wherein the relations established between the members of the audience or between them and the art objects are much more passive and formal (usually directed by certain formal instructions, given by the artists, that are to be followed during the exhibitions)⁵⁷³.

Participatory exhibitions overcome the traditionally existing 'strict division of labour in the art world' that, as von Osten describes it, led to 'divided roles of the artist as autonomous producer, of the curator and the gallerist as autonomous distributors, and of the audience as passive consumers [...]'⁵⁷⁴. The 'transgressive practices', as von Osten calls it, of artists in the 1960s that developed conceptual art, happenings and performances that emerge the viewer into the art work, participatory exhibitions would finally allow the public to leave their role as mere spectators and become actual producers of the exhibition and the art work. By sharing the authorship of the exhibited work with the user or exhibition public artists and architects are taking an approach that deliberately accepts risks and uncertainties in regard of the process and the resulting work. More importantly this form of participation acts not only as a 'catalyst for transformation of the role (and eventually lives) of users, but also [as] a transformation of the architectural practice⁵⁷⁵. *Traumhaus 2000* stands in this tradition of the participatory exhibition that is in itself a 'Place of Architectural Production'.

In relation the Laboratory as a 'Place of Architectural Production', one could further argue that *Traumhaus 2000* and that this form of exhibition, with its accompanying programme of lectures and workshops that create a place of deliberation and production of knowledge and meaning in a confined space, has an affinity to the

⁵⁷² LISSITZKY-KÜPPERS, Luise (ed.) (1967). *El Lissitzky – Maler Architekt Typograph Fotograf, Erinnerungen Briefe Schriften*. VEB Verlag der Kunst: Dresden. p329
[das privateigentum am schöpferischen muss vernichtet werden, denn alle sind schöpfer und es gibt keinerlei veranlassung zur einteilung in künstler und nicht-künstler]

⁵⁷³ MILEVSKA (2006).

⁵⁷⁴ VON OSTEN (2005). p209

⁵⁷⁵ BLUNDELL-JONES et al (2005). pxvi

original concept of the *museion*⁵⁷⁶. *Museia* were often located within or in relation to schools or clubs of poets and philosophers and consequently became the assembly places of artists and scholars. They would act as places of study and deliberation, of the creation and exchange of knowledge. *Traumhaus 2000* and the *AkademieGalerie* as its locale provided a similar academically related environment in which the deliberation about a specific topic, namely our ideas of the 'dream home', took place.

The installation has already been mentioned in relation to the participatory praxis that includes the audience into the production process of the exhibition. On first sight, one would further assume that *Traumhaus 2000* also relates to the installation in regard of the installations quality as a 'Laboratory in Real Scale'. Yet while *Traumhaus 2000* fulfils all key principles of an art installation as described in Chapter 3 – namely site specificity, spatiality, engagement of the viewer, and temporality – it is less clear whether, as a spatial installation, it fulfils the additional principle that would classify it as an architectural installation – namely experimentation with the space or the physical set-up of the installation.

The long yellow wall, which acted as the main display device on which the collected questionnaires and sketches would be pinned up in the process of the exhibition, clearly transformed the 'white cube' character of the gallery. It changed the appearance of the gallery space and consequently changed its perception from the public underground passage way. In that respect one could claim that the use of colour acted as an architectural experiment through which space and its perception was changed. However, this experimentation was rather a by-product than an intention of the exhibition and its producers.

⁵⁷⁶ See PART I, Chapter 5, Section 'Museion – creation and exchange of knowledge'

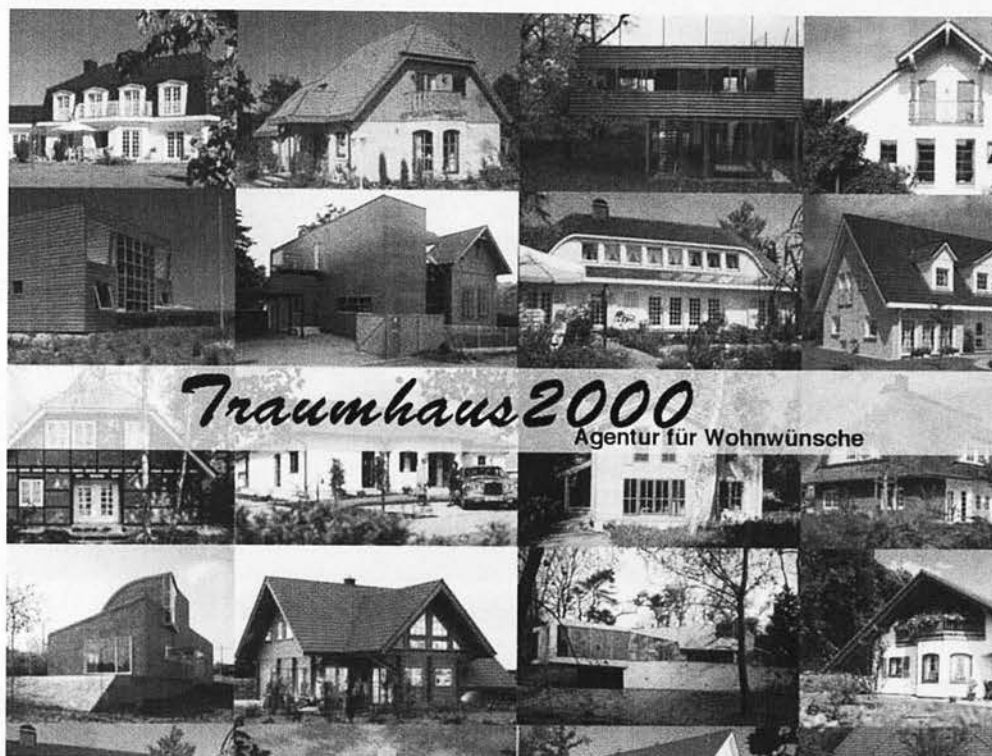


Figure 61: Traumhaus 2000 - Invitation card, showing a range of single detach houses.



Figure 62: Traumhaus 2000 - the agency seen from the public underground passage at Metro Station 'Universität'.



Figure 63: Traumhaus 2000 - workshop with school children in the Agency



Figure 64: Traumhaus 2000 - The 'finished' wall of Agency filled with questionnaires and sketches.

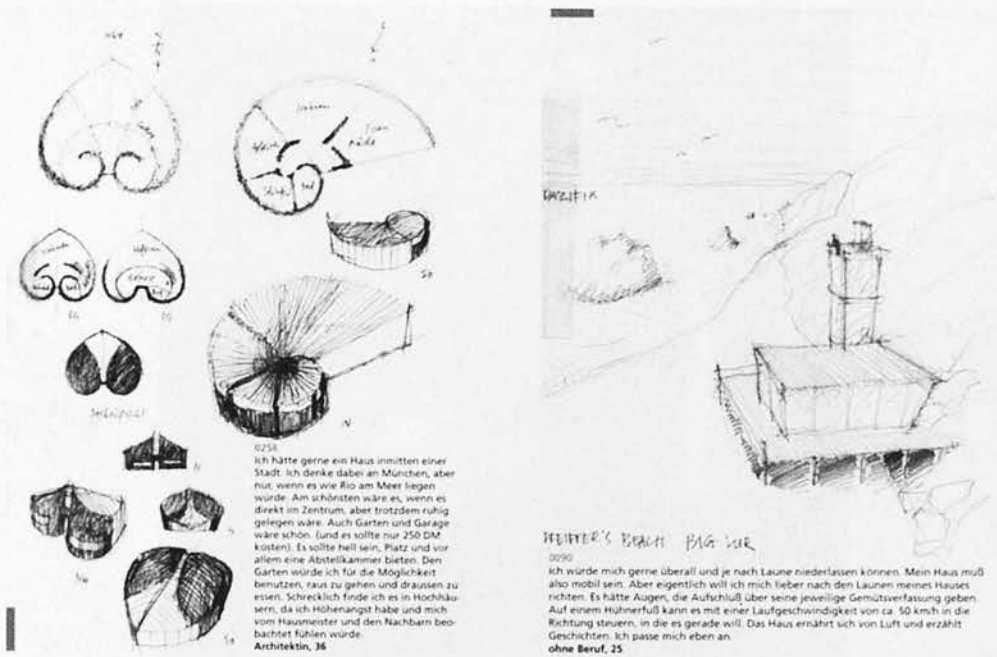


Figure 65: Traumhaus 2000 - two examples of sketches by Agency visitors depicting their 'dream-home'.

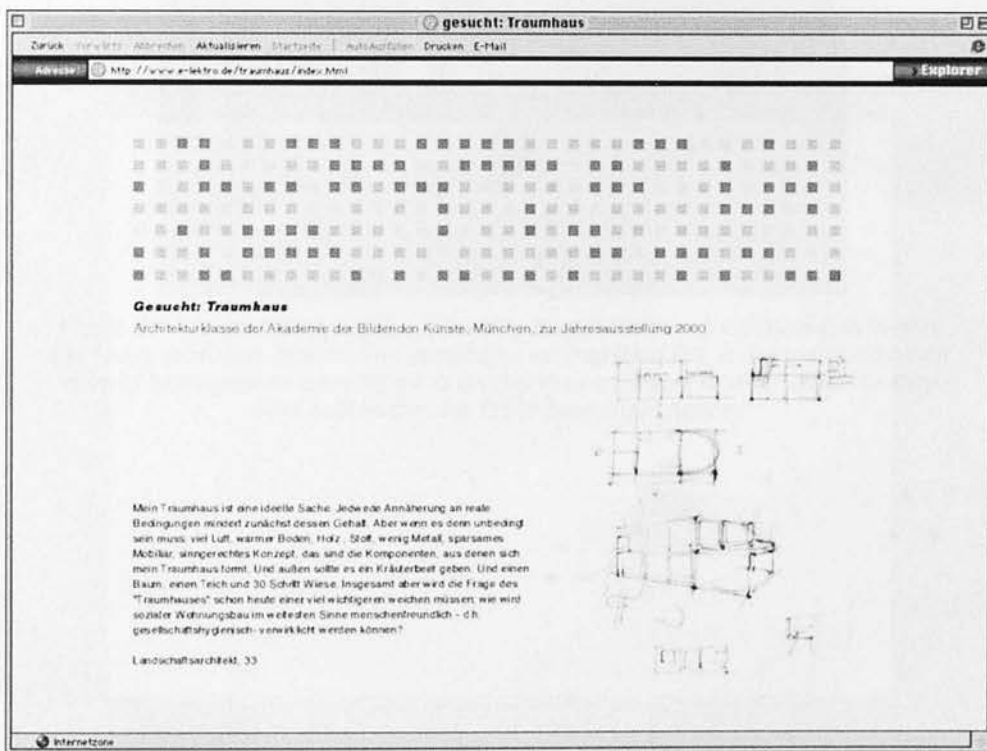


Figure 66: Traumhaus 2000 - traumhaus-website showing selected sketches and accounts of dream homes as well as analytical data.



Figure 67: Traumhaus gesucht ..., [Seeking Dream Home ...], installation in front of the Haus der Kunst, Munich. The installation appropriated the, in Germany, common form of looking for an apartment to display the verbalized 'dream homes' as they were collected in the Traumhaus 2000 Agency.

CHAPTER 11 – Less Aesthetics, More Ethics – Setting New Agendas

The first idea that came to mind was to use the exhibition as a kind of laboratory in which to analyse the new planetary dimensions of urban transformation and behaviour and to attempt to give them a form that could be understood.

Massimiliano Fuksas⁵⁷⁷

I do exhibitions like I do projects. It is the same thing.

Massimiliano Fuksas, in an interview with the author, 15.02.2006

Exhibition data:

- Exhibition Title: *Città: Less Aesthetics – More Ethics, 7th International Architecture Exhibition, La Biennale di Venezia*
- Architect(s): various
- Curator: Massimiliano Fuksas with Doriana O. Mandrelli
- Exhibition Designer: Massimiliano Fuksas with Doriana O. Mandrelli
- Others involved:
- Exhibition Date (s): 19 June – 29 October 2000
- Exhibition Venue(s): *Biennale di Venezia - Arsenale* and Italian Pavilion in the *Giardini di Castello*
- Venue Type: disused naval area with sequence of different sizes sheds (Corderie over 400 meters long); pavilion in exhibition park
- Exhibition Sub-type: Curated Laboratory; Laboratory in Real-Scale Biennale
- Source material:
- Interview: Kossak - Fuksas (15. 02. 2006)
Domus – Fuksas – Hollein (printed in *Domus 874*)
- Press Text: yes
- Catalogue: MANDRELLI, Doriana O. (ed) (2000). *Less Aesthetics – More Ethics*. (two volumes). Marsilio: Venice
- Web Site: No longer functional
- Key References: LA BIENNALE DI VENEZIA (eds.) (2006). *Un secolo di architettura alla Biennale e in Europa*. Marsilio: Venice
'Surexposition' *l'Architecture d'aujourd'hui* 330, September-October 2000; 'Hollein vs. Fuksas'. *Domus 874*, October 2004
- Author's Involvement: I have contributed to the 7th Architecture Biennale in several ways. Firstly, through the participation in the ideas competition '*Città: Third Millennium*', together with Tatjana Schneider and Allan Atlee for GLAS. The competition entry was selected for the publication as well as the multi media presentation of the competition during the Biennale in the Italian Pavilion. Secondly, through a contribution to Otto Steidle's installation '*The Nomad's*

⁵⁷⁷ MANDRELLI, Doriana O. (ed.) (2000). 7th International Architecture Exhibition. *Less Aesthetic – More Ethic*. Marsilio: Venice. p11

Tower in form of a 17 min video interview with Otto Steidle which was one of four videos that were shown in conjunction with the *Tower*. Thirdly, as assistant in the setting up of *The Nomad's Tower* which allowed me to experience the Biennale in its last days of production prior to the public opening.

Subjects of the exhibition

Who are the primary producers?

While the *Architecture Biennale*, as most other biennales, is on the one hand an exhibition format in which the works of individual architects or artists are exhibited, it is on the other hand also the exhibition of a creation or work done by the curator or a curatorial team. And while individual exhibition contributors may create new work for these exhibitions and use the exhibition as a laboratory for their own work, the curation of these large shows produces often a form of meta-exhibit and experiment according to the agenda of a curator or a curatorial team. This tendency comes even more to the fore when the curator is in fact an architect (or in the case of art biennales an artist) and when the exhibition and the work of his/her peers are used to present or experiment with his/her own architectural agenda. This exhibition example will therefore not primarily deal with individual works by exhibiting architects but focus on the work of the architect-curator of this 7th Architecture Biennale, Massimiliano Fuksas.

The opening line of the biographies that can be found in numerous publications on or by Fuksas as well as on the practice's web site start with the line 'Of Lithuanian origin, Fuksas was born in Rome...' which indicates already a motive within Fuksas' character and architectural practice. Marie-Christine Lories, editor in chief of the *Technique et Architecture*, calls Fuksas a 'transeuropéen', a transeuropean⁵⁷⁸. Fuksas practices since the early 1970s, first exclusively in Italy where he produced a series of school buildings and cemeteries as well as residential buildings, before entering the European scene in 1988 with the, un-built, 'trans-European' project *Tour Européenne* that was a collaborative work by the Italian Fuksas, the French Jean Nouvel, the English William Alsop and the German Otto Steidle⁵⁷⁹. Fuksas consequently established a second office in Paris and has since then maintained a professional 'duality', being part of the French as well as the Italian architecture scene as well as practicing internationally with projects in Germany, The Netherlands, but also Tokyo and Hong Kong⁵⁸⁰.

Fuksas describes himself as an 'imagist' – one who is able to liberate the first ideas into an explosion of line and colour seemingly without so much of the mechanical process

⁵⁷⁸ LORIES, Marie-Christine (2000) 'Biennale de Venise – Less aesthetic, more ethics?' in: *Technique & Architecture*, no. 449, Aug./Sept. 2000. p121

⁵⁷⁹ see: GOULET, Patrice (1988). *Hérouville-Saint-Clair – Une Tour Européenne*. Edizioni Carte Segrete: Rome

⁵⁸⁰ For a complete project list see: MOLINARI, Luca (2006). *Massimiliano Fuksas: works and projects 1970-2005*. Skira: Milan / Thames&Hudson: London

from mind to hand that so often dilutes designs'⁵⁸¹. Whether Fuksas indeed refers here to the literary movement of the early 20th century with its search for clear images in poetry is not entirely clear⁵⁸². What is however clear from Fuksas' work is the use of strong imagery, both in his paintings proceeding any projects as well as in his final, often very visually enticing, buildings. Fuksas' understanding of the architect is that of an artist and he regards architecture as part of the arts.

In terms of Fuksas' work as an exhibition curator one can quote here Hans Hollein, Fuksas' predecessor as *Biennale* director, who explains that 'we are in an age of crossover, which means we are not pigeonholed as the architect, the curator, the researcher, the historian, the painter or the sculptor. Today we live in a world where we can move between formerly very tight fields. The borders are being erased and this is a very important development'⁵⁸³. And while Fuksas would probably not describe himself as a researcher and historian, he sees his work as a crossover between the disciplines, or rather regards them not as different disciplines in the first place. This is for instance expressed in his statement: 'We are part of art. We are part of art and the art is part of architecture. Music and movies, people, life, weather, nature, disaster, everything, it is all part of architecture'⁵⁸⁴. And asked whether there is a difference in his approach to buildings and to curating and designing an exhibition he states: 'I do the exhibitions like I do projects. It is the same thing'⁵⁸⁵.

Besides the curation of the *Biennale*, Massimiliano Fuksas and his team had also the supervision of the whole exhibition design of the show. According to Fuksas it was paramount to take an all-encompassing approach to the *Biennale*: '[...] we didn't just deal with the concept but also the organisation of the exhibitions. [...] We produced all the drawings of the exhibition space down to the details: everything was in balance. There wasn't our concept on one hand, and on the other hand somebody asking if you can put an object in a particular place'⁵⁸⁶. The justification he gives here for this position is revealing in terms of his view on exhibitions in general: 'After all an exhibition is an

⁵⁸¹ Statement taken from www.fuksas.it/html/entrata.html, here section 'vision – philosophy'

⁵⁸² 'Imagist' usually describes a early 20th century Anglo-American movement in poetry, including poets such as Ezra Pound, that sought clarity of expression through the use of precise images.

⁵⁸³ CAPEZZUTO et al. (2004). p46

⁵⁸⁴ Excerpt from interview with Massimiliano Fuksas, conducted 15.02.2006

⁵⁸⁵ Ibid.

⁵⁸⁶ CAPEZZUTO et al. (2004). pp46-47

installation; it can't be anything else. You cannot delegate because it is your installation⁵⁸⁷. Fuksas uses here the term installation in the context of an authored piece of artistic work, similar to an art installation.

Hans Hollein, director/curator of the *6th Architecture Biennale* in 1998, and Massimiliano Fuksas discuss this producer-led approach to the *Biennale* that encompasses everything from the concept to the exhibition design in a double interview published by *Domus*⁵⁸⁸. Hollein proposes that 'an architect or artist [who makes an exhibition], ... knows how to build a clearer, [...] more complex picture'⁵⁸⁹ and Fuksas concurs by saying that 'a historian or architectural critic tends to organise an exhibition with a scheme ... with three, four or five categories and they put the works and authors inside these boxes'⁵⁹⁰. Hollein further adds here in regard of his understanding of the architect-curator: 'I didn't want to be an exhibition designer but be in charge of the whole: the message, the ideas, sometimes the research, and of course the *allestimento* or design. I think the kind of message you can get across with an exhibition is different from the kind you can achieve with a publication. Maybe when an architect or artist does it, he knows how to build a clearer, but more complex picture'⁵⁹¹.

While it was stated above that the main focus should here be on the role of the curator, Massimiliano Fuksas, one should not completely omit the actual architects who produced work for the Biennale. This is of interest in as much as the *7th Architecture Biennale* devised several new methods to actually identify architects for the exhibition.

While the *7th Architecture Biennale* had its main exhibition event with the physical exhibition in the *Giardini* and the *Arsenale* from June to October 2006 it was preceded

⁵⁸⁷ Ibid. p47

⁵⁸⁸ Ibid. p46

⁵⁸⁹ Ibid.

⁵⁹⁰ Ibid.

⁵⁹¹ Ibid.

Capezutto et al. compare the curating of the architecture biennale with the situation of the art biennales where, in recent years, artists have taken on the role of the curator while the architecture biennale took over its latest three editions the opposite direction. One can note here that the directors from the first to the seventh Architecture Biennale have all been architects – Paolo Portoghesi (1st and 2nd Biennale), Aldo Rossi (3rd and 4th), Francesco Dal Co (5th), Hans Hollein (6th), and Massimiliano Fuksas (7th). They have been followed by the architectural critic Deyan Sudjic, (8th), the architectural historian Kurt W. Forster, (9th), and, most recently, by the academic and policy adviser Richard Burdett, (10th); all latter three being predominantly concerned in their work with the perception, reflection and presentation of architecture rather than the primary production of it.

by two important preparatory stages. *Città: Third Millennium International Competition of Ideas* and *Expo On-Line* served, as Doriana Mandrelli puts it, 'to identify and produce a map of the world of international architecture. There were many unknown architects who having presented themselves for the competition were then selected for the exhibition'⁵⁹². She further explains: 'The idea on which our reasoning was based [for this on-line forum and exhibition prior to the actual *Biennale*] was fairly simple. The exhibition's topic had to firstly entail and seek out an ongoing conversational interchange with (very) young architects'⁵⁹³.

In these two preceding, web-based exhibition parts 840 architects or architectural practices and architecture students and student groups were involved⁵⁹⁴. At the actual Biennale event another several hundreds were involved in the national pavilions that are not dealt with here⁵⁹⁵. In the exhibition part *Less Aesthetics, More Ethics* that was specifically curated by Massimiliano Fuksas 85 artists, architects or architectural practices were exhibiting. These architects or architectural practices were:

Hitoshi Abe; Vito Acconci; William Alsop; Architecture Office Casagrande & Rintala; Architekturbüro Böhm; Michael Bell; Michael Chan – EDGE Architects Ltd; Gary Chang; Yung Ho Chang; Ti-Nan Chi; Coop Himmelb(l)au; E-City; Gigantes Zenghelis Architects; Itsuko Hasegawa; Zvi Hecker; Hans Hollein; Ulrich Königs & Ilse Maria Königs Architekten; Anne Lacaton & Jean Philippe Vassal; Duncan Lewis; William Lim; Armin Linke; Metapolis; Maurizio Nannucci; Paragon Architects; Dominique Perrault; Renzo Piano; Sixten Rahlff; R&Sie. D/B:L; Richard Rogers; Fernando Romero; Seung H-Sang; Paolo Soleri; Clorindo Testa; Wiel Arets & Associates Bv; James Wine / SITE; Riken Yamamoto; AMIS; ART'M Architecture – Piotevin & Reynaud; Shigeru Ban; Judith Barry; Stefano Boeri; Brenac & Gonzalez; Diller & Scofidio; Didier Fiuza Faustino; Philippe Gazeau; Alain Guiheux & Dominique Rouillard; Jacques Hondelatte; Arata Isozaki; Marin Kasimir; Stéphane Maupin; Sohn-Joo Minn; NAÇO – Alain Renk et

⁵⁹² MANDRELLI, Doriana O., (2000). 'First Architecture Biennale of the third Millennium' in MANDRELLI, Doriana O. (ed.) (2000). *Less Aesthetics – More Ethics*. (two volumes). Marsilio: Venice. p429

⁵⁹³ Ibid. p428

⁵⁹⁴ The 'Competition of Ideas' had 745 participants (485 Architects/260 Students), the *Expo On-Line* featured contributions by 95 architects or architectural practices. Figures collected from MANDRELLI, Doriana O. and BRUGELIS, Pino (2000). *Città: Third Millennium, International Competition of Ideas*. Marsilio: Venice and MANDRELLI (2000).

⁵⁹⁵ Precise figures do not exist in any one catalogue or documentation. Several countries like Canada for instance showed only the work of one architect/artists while others, like for instance Spain showcased work of several dozen architects.

Marcelo Joulia; Jean Nouvel; Gaetano Pesce; Eko Prawoto; Franco Purini; Rudy Ricciotti; Stalker; Otto Steidle; Robert Venturi & Denise Scott Brown; Krzysztof Wodiczko; Paola Yacoub & Michel Lasserre; Asymptote / Hani Rashid & Lise-Anne Couture; Peter Cook; Odile Decq + Benoit Cornette; dECOi / Marc Goulthorpe; Futurama y2k; Gruppo A12; Zaha Hadid; Toyo Ito; Hiroaki Kitano + Tatsuya Matsui; Kovac Malone; Kengo Kuma; Greg Lynn; MVRDV; NOX / Lars Spuybroek; Kas Osterhuis; Ortlos Architects: Ivan Redi; Project.co.jp; Reiser & Unemoto; Makoto Seit Watanabe / Architect's Office; Kazuo Sejima & Ryue Nishizawa; Bernhard Tschumi; UN Studio / Ben van Berkel Caroline Bos

It is evidently beyond the remit of this case study to even attempt a brief description for all these architects or the work that they exhibited in the *Biennale*⁵⁹⁶. In relation to the curation of the biennale exhibition and in that relating to the role of the curator Massimiliano Fuksas it seems furthermore more revealing how these architects were selected for the exhibition and what kind of exhibition, or rather what theoretical and ideological direction or bias this selection generates. One can assert here that the selection showed a strong bias towards East Asian and Japanese architects as well as a strong presence of North American, French and Italian architects, the latter two probably explicable through Fuksas' practice being based both in Paris and in Rome. On the other hand, the exhibition showed almost a complete neglect of architects from Eastern Europe and only few architects from European countries that were around 2000 in the centre of the usual architectural media attention (Scandinavia, Spain, Germany, Austria etc)⁵⁹⁷. Regarding one of the exhibition's declared main topics, namely the Metropolis of the third millennium, the fact that the exhibition also featured almost no African or Central or South American architects was probably more surprising⁵⁹⁸.

Who are the secondary producers

Like many art biennials, architecture biennials, and the *Venice Biennale* in particular, have lately become major cultural spectacles. This is reflected through their increase in sheer size as well as the raising visitor numbers. The predecessors to the 7th

⁵⁹⁶ One has to refer here to the exhibition catalogue, MANDRELLI (2000) and further literature regarding these artists and architects.

⁵⁹⁷ Similarly, several of the so-called 'architectural stars' were not selected for or presented in the exhibition, including Frank O. Gehry, Rem Koolhaas, Herzog & DeMeuron, or Norman Foster to name only a few.

⁵⁹⁸ With Paragon of South Africa and Fernando Romero of Mexico being the sole exceptions

Architecture Biennale have been, although well visited exhibitions in terms of usual numbers for architecture exhibitions, relatively modest in their visitor numbers. This changed dramatically with *Less Aesthetics, More Ethics* that attracted 70.000 visitors. This tendency of rising visitor numbers has steadily increased over the last three editions with visitor numbers reaching 130.000 for the *10th Biennale* in 2006⁵⁹⁹. The visitor numbers for the different art forms together reach up to 320000 visitors per year, which still only a fraction of the 17 million tourists that are visiting Venice each year⁶⁰⁰.

There seem to be no ascertainment of the actual composition of this audience for the *Architecture Biennale*. Stuart MacDonald sees the nature of this audience as 'primarily professional audience, but it is a world professional audience'⁶⁰¹. And Will Alsop makes a revealing comment when he says that 'What I really enjoy [the most about Venice and the *Biennale*] is that there are all these other architects there at the same time, having a good time. That's really what it is all about. You walk down along a street, and you go into a bar and you see someone that you haven't seen in a long time. It is a social event, very enjoyable. The work is somehow an excuse to have the event'⁶⁰².

Hans Hollein's takes here almost the opposite position when he states that 'it's important that exhibitions like the *Biennale* are made for the people, and for a lot of people. You don't make a painting exhibition just for painters or an architectural exhibition just for architects. You make them for an interested and curious public. This is why it's necessary to transfer things for everybody that must be understood from different angles of knowledge or educational backgrounds'⁶⁰³. Luca Molinari supports this argument and attests *Less Aesthetic – More Ethic* a success in this regard when he writes that 'the 7th Biennale of Architecture in Venice [...] has achieved its prime objective, which is by no means negligible. The reputedly 'elitist' exhibition has been turned into a media event capable of attracting the general public'⁶⁰⁴.

⁵⁹⁹ Source: <http://www.labiennale.org/en/biennale/history/> [Last accessed: 16.06.2008]
8th AB 'Next' in 2002 - 101.000 visitors, 9th AB 'Metamorph' 115.000 visitors, 10th AB 'Cities – Architecture and Society' in 2006 - 130.000 visitors

⁶⁰⁰ Peter Murray, director of the *London Architecture Biennale* makes this point when he writes that 'the [Venice Biennale] organisers certainly seem to need more people. The 2004 Biennale attracted just 115.000 visitors over three months, compared to the London Biennale's 75.000 over ten days'. MURRAY, Peter (2006). 'Venice is a window to the world', *Building Design*, 1 September 2006

⁶⁰¹ Excerpt from interview with Stuart MacDonald, conducted 30.07.2005

⁶⁰² Excerpt from interview with William Alsop, conducted 15.08.2005

⁶⁰³ CAPEZZUTO et al. (2004). p47

⁶⁰⁴ MOLINARI (2000). p54

Fuksas saw the *Biennale* also as 'part of the debate on the new, transforming social and urban context'⁶⁰⁵ and as such any audience would therefore consequently be part of this very debate. As in all exhibitions, the audience has thus a role in the completion of the exhibition through the production of meaning on behalf of the recipient. The very differing exhibition reviews in both the professional and the general press are here testimony of the diversity that such a secondary production of meaning can have. However, beyond this very common role, the exhibition did not provide any discernible participatory role for the general audience⁶⁰⁶.

This apparent neglect of the audience as possible contributor to the exhibition might be explained through a statement in which Massimiliano Fuksas explains the incentive behind an architectural exhibition: 'An exhibition isn't something necessary. You do it because you're trying to formulate a conceptual synthesis of what you think could happen in a few years, and the way the art and architectural worlds can offer a response'⁶⁰⁷. The audience is here not needed to formulate or even comment on the presented architectural propositions. This position does not leave an opportunity for an audience engagement that comes from outside the architectural or art profession. It leaves the autonomy of the auteur, whether this is the curator or the exhibiting architect, unquestioned.

Object of the exhibition

What is the exhibition topic / nature of the emerging architecture?

It is within the nature of an exhibition of the *Biennale*'s size that the subject-matter is multi-faceted and somewhat elusive, even if it heralds a programmatic title such as *Less Aesthetics, More Ethics*. Nevertheless, one can find the key to the exhibition's subject-matter in the title. *Less Aesthetics, More Ethics* was a proclamation that inherently went beyond the usual intra-disciplinary discourse of architecture. The exhibition differs here from its six predecessors as Stefano Cagol explains when he

⁶⁰⁵ quoted from: BULLIVANT, Lucy (2000) 'Algorithms in the Sky', *Mute magazine*, sourced from www.metamute.org, created 09 September 2000. [no longer available online]

⁶⁰⁶ The *Biennale* had almost no exhibits that allowed a further, participatory engagement by the audience, - an exception here would be Ulrich and Ilse Maria Koenigs *Diversity – Field Study* a sort of mini-biotope in a glass box that depended on the visitors to be nourished - An experiment that gloriously failed within the first week of the exhibition. One could further name a number of installations that were set up for the audience to enter into a specific space or situation (Arata Isozaki; Gary Chang / Edge Architects, Hong Kong)

⁶⁰⁷ CAPEZZUTO et al. (2004). p47.

http://www.domusweb.it/Domus/latest/singola_news.cfm?CodNews=30248&Tipo=1

writes that 'the seventh [*Architecture Biennale*] edition runs against the formula of the preceding exhibitions [as it] abandons the idea of an architecture that is understood purely as a building inserted into a specific context, but embraces instead a survey of 360 degrees of the contemporary city'⁶⁰⁸. And it is thus, on a first level, the *Città – Terzo Millennio*⁶⁰⁹, the megalopolis of the 21st Century, that the exhibition deals with. 'By moving the debate onto the megalopolis', Cagol explains, 'Massimiliano Fuksas introduces a Biennale of research, interrogation and critique of the traditional parameters that are used by architecture and urban planning'⁶¹⁰.

Yet *Less Aesthetics, More Ethics* is not just understood as a topical observation or the reflection on an existing tendency but it is understood as a directive or invitation to the profession to act in a certain way. Fuksas makes this point explicit when he says '*Less Aesthetics, More Ethics*, in a way this is to say, we are not only seismographers, but we decide. We have to make decisions, [we have] to choose what we want'⁶¹¹. In that respect the subject-matter of the exhibition could be regarded as the search for a new approach to architecture that architects and those involved in the production of the built environment should follow suite. To use Fuksas words again, 'it was [...] a request for something else. Something different from the architecture with which we share the entire span of our existence and whose tortured life we try to prolong. [...] What was needed was a rediscovery of the awareness that the quality of architects and their work is not enough'⁶¹². Fuksas partner and co-curator Doriana Mandrelli formulates this with the following words: 'We weren't looking for new architecture, but rather a new essence of architecture'⁶¹³.

It can be argued that the exhibition understands and presents, with varying degrees,

⁶⁰⁸ CAGOL (2006). p62

[*La settima edizione contravvenendo all'impostazione delle mostre precedenti, abbandona l'idea di architettura intesa come edificio inserito in un contesto specifico, per abbracciare un'indagine a 360 gradi sulla città contemporanea*]

⁶⁰⁹ *Città – Terzo Millennio* was the title of the open ideas competition that preceded the 7th *Architecture Biennale*.

⁶¹⁰ CAGOL (2006). p64

[*Massimiliano Fuksas, spostando il dibattito sulle megalopoli, presenta una Biennale di ricerca, interrogazione e critica dei parametri tradizionali utilizzati dall'architettura e dall'urbanistica*]

⁶¹¹ Excerpt from interview Massimiliano Fuksas, conducted 15.02.2006

The 'seismographers' refers here to the theme and title of the preceding 6th Biennale '*Sensori del Futuro – L'architetto come sismografo*' directed by Hans Hollein.

⁶¹² FUKSAS, Massimiliano (2000) '*Less Aesthetics, more Ethics*' in: MANDRELLI, Doriana O. (ed.) (2000). *Less Aesthetics – More Ethics*. (two volumes). Marsilio: Venice. pp11-12

⁶¹³ MANDRELLI (2000). p428

architecture as material reality, as intellectual construct as well as societal process. As the above quote from Doriana Mandrelli, regarding the search for 'a new essence of architecture' indicates, the exhibition understood architecture definitely as an intellectual construct. The key concepts of the programmatic exhibition title and consequently of the exhibition, 'Aesthetic' and 'Ethic' are first and foremost intellectual concepts or constructs. Fuksas underlines this when he proclaims that 'the exhibition is part of the debate on the new, transforming social and urban context – and architects' commitments as intellectuals'⁶¹⁴.

However, these intellectual concepts are rather the starting point, one could also say the trigger, for a material exploration of the theme than a topic in themselves that would be meticulously explored with any intellectual rigor⁶¹⁵. For Fuksas and the exhibition it is the reciprocity and interdependence between architecture as material reality and architecture as intellectual construct that are of importance here and that are put to the fore. For Fuksas, the question for a redefinition of the relation between aesthetics and ethics is rooted in the material, and built, reality. He explains that when he talks about his starting point for the Biennale: 'The first [step] for me was to have a confrontation between [what constitutes our] crazy world - with war, immigrants, environment, disaster, transportation, energy problems, etc - and that what we, the artists, what we can do [to address these issues]'⁶¹⁶. The last part of this statement identifies architecture also as a 'societal process',

Fuksas and the exhibition were indeed less interested in the intellectual or even philosophical debate about aesthetics and ethics but rather their relevance or consequences for architecture and the built environment, for the material world and the way we live in it. This becomes evident in the following statement: 'The "Instructions of Use" advice was not to look for etymological or philological explanations for LA, ME [*Less Aesthetics, More Ethics*]; [...] not to spend months debating whether it is aesthetics that include ethics or vice versa. I sincerely hope that no one has the bright idea of dusting off Kant's three theories. The answer is in the ninety or so installations, that make up, as they should do, the heart of the exhibition'⁶¹⁷.

In the exhibition catalogue, Fuksas explains that the exhibited projects, or installation,

⁶¹⁴ Quoted in: BULLIVANT (2000)

⁶¹⁵ This is indeed a point that several exhibition reviews have questioned.

⁶¹⁶ Excerpt from interview Massimiliano Fuksas, conducted 15.02.2006

⁶¹⁷ FUKSAS (2000). p12

can 'be divided into three groups: ENVIRONMENTAL, the object and subject of reflection; SOCIAL, the study of the transformations that are taking place; TECHNOLOGICAL, information, communication, networks, virtual reality'⁶¹⁸. And he adds: 'A fourth could also be added as a summary of the others'⁶¹⁹. And while the aesthetics and ethics of architecture were explored in relation to the social, the environmental and the technological, it can be argued, as for instance Marie-Ann Loriers does, that this interdependence was not explored enough, or in many instances not profound enough. Loriers regrets that, 'despite the call for ethics, questions regarding the economic system and production are nowhere asked [...]'⁶²⁰, - an assertion that is with no doubt justified for the majority of the *Biennale* contributions and probably for the exhibition as a whole. There were, however several architects that did explicitly address the questions of economy and production in their installations. One could name here for instance Jean Nouvel's unsparing examination of *Némausus*, Otto Steidle's *Nomad's Tower* or Gary Chang's *Cage Houses*⁶²¹. But it is Fuksas himself who acknowledges this shortcoming when he assesses that 'I discovered that out of a lot of architects, only a few were ready'⁶²².

What is the architectural research that is conducted through the exhibition?

It has already been mentioned above that this *7th Biennale* went beyond the focus of intraprofessional or intradisciplinary questions. As Fuksas puts it, 'it was [...] a request for something else. [...] What was needed was a rediscovery of the awareness that the quality of architects and their work is not enough'⁶²³. Stefan Cagol asserts that 'by moving the debate onto the megalopolis, Massimiliano Fuksas introduces a Biennale of research, interrogation and critique of the traditional parameters that are used by

⁶¹⁸ Ibid. p16

⁶¹⁹ Ibid.

⁶²⁰ LORIERIS (2000). p122

[*Et l'on regrettera, pour la crédibilité de cette biennale, que, malgré cet appel à l'éthique, nulle part ne soit posée la question de la commande, celle du système économique et de la production[...]]*

⁶²¹ Nouvel had designed the *Némausus* social housing project in 1985-87 when it found great acclaim and featured in every journal. Due to changes in the political and its economic basis it has since run into severe problems. Otto Steidle's *Nomad's Tower* explored the notion of nomadic economies between the urban and the countryside. Gary Chang's *Cage Houses* addressed the deprived and hidden housing economies of this booming city.

⁶²² Excerpt from interview Massimiliano Fuksas, conducted 15.02.2006

⁶²³ FUKSAS (2000). pp11-12

architecture and urban planning⁶²⁴. The exhibition was thus seeking insights into a world beyond the professions' own architectural world. Fuksas comments in this regard: 'The first [step] for me was to have a confrontation between [what constitutes our] crazy world - with war, migrants, environment, disaster, transportation, energy problems, etc - and that what we, the artists, what we can do [to address these issues]'⁶²⁵.

However, one has to be aware that for Fuksas and the exhibition 'world' is here synonymous with the urban, the *città*. It is here in 'the metropolis' where Fuksas, the exhibition, and almost all individual exhibition contributions, see their field of exploration, research and, in part, propositions. The exhibition's architectural research thus concerns, to quote Denis Moreau, no less than the scrutinization of 'the new planetary dimensions of urban transformation'⁶²⁶.

An, allegedly, adequate architectural approach to the examination of these globally occurring urban transformations has been suggested through the Biennale's theme '*Less Aesthetics, More Ethics*'. As for the results Fuksas asserts 'that many of the works on show at the Biennale, give us the answers we are looking for. At the same time we are talking about a laboratory of ideas and it is too early to make conclusions. For the moment, the exhibition signifies the beginning of a process, of an investment in the future'⁶²⁷.

Processes and form of the exhibition

How is the exhibition 'set-up' in order to provide the testing ground for the architectural research?

As a curator, Fuksas had two primary and one secondary means at his disposal to device an experimental set-up for the exhibition. The first one concerns the actual positioning of a theme and formulation of a research question thereof. This aspect has already been dealt with in the previous question. What should however be highlighted

⁶²⁴ CAGOL (2006). p64

[Massimiliano Fuksas, *spostando il dibattito sulle megalopoli, presenta una Biennale di ricerca, interrogazione e critica dei parametri tradizionali utilizzati dall'architettura e dall'urbanistica*]

⁶²⁵ Excerpt from interview Massimiliano Fuksas, conducted 15.02.2006

⁶²⁶ MOREAU, Denis (2000). 'Flou objectif ou générique', *Architecture d'Aujourd'hui*. No.330, Sept/Oct.2000. p72

⁶²⁷ FUKSAS (2000). p12

here is that it is the examination of these themes - namely the transformation of the megalopolis and the question how ethics and aesthetics relate to this phenomena and its problems – that constitutes the basis for what Fuksas calls a 'laboratory of ideas'⁶²⁸. By formulating a hypothesis – 'Less Aesthetics, More Ethics' – Fuksas challenged the invited architects and artists to respond with experimentations, deliberations, or propositions to this hypothesis and to use the *Biennale* as laboratory in which they could develop and test their work.

The second primary means concerns the actual selection of the contributing architects and artists and the processes how this selection came, at least partly, about. One can discern two different ways in which curators that put an exhibition with work of still producing architects or artists together can operate. They can either select from the existing work of specific artists/architects and present these works according to a certain theme that has been devised for the exhibition⁶²⁹. Or they can select specific architects/artists and commission them to produce new work for the exhibition according to this specific theme or question. The *7th Biennale* falls more or less into this latter category⁶³⁰.

By selecting certain contributors, in effect by selecting his/her team of researchers or laboratory workers, a curator consequently also affects the set-up of the entire experiment/exhibition. (This effect is even greater in the case where the laboratory workers are mostly very creative producers with their own, hidden or open, agenda.). However, by selecting certain contributors over others the curator has the opportunity to direct the experiment/exhibition into a particular direction. While he/she will have an interest that the exhibition displays a certain diversity it is also in the curator's concern to contain the works within a set of parameters that allow for the experimentation and presentation of a specific agenda.

Fuksas and Mandrelli had devised two decisive tools in the selection process. These were two web-based forums or initiatives that preceded the actual *Biennale* – namely the *Expo On-line* and the open competition *Città: Third Millennium*. The two tools

⁶²⁸ Ibid. p12, p16

⁶²⁹ One could see the 8th and 9th *Architecture Biennales, Next* curated by Deyan Sudjic and *Metamorph* curated by Kurt W. Foster in this category.

⁶³⁰ Although *Less Aesthetics, More Ethics* presented predominantly new work, there were also a number of works presented that were just 'reformatted and adapted' to the given theme. One could name here Richard Rogers' presentation of the Welsh Assembly project, Shigeru Ban's temporary shelter huts made of cardboard tubes, or MVRDV's *Meta City Data Town* to name just some of the most prominent examples.

where used to both explore and first test the exhibitions topic as well as to identify possible contributors that were not yet on the curators' radar. Mandrelli writes here in regard of the former: 'The new Biennale site, through *Expo On-line* and the Forum, has given the possibility to architects, artists, and all who have felt enthralled by the topic proposed by director Massimiliano Fuksas, "*Città: Less Aesthetics, More Ethics*", to propose and disclose ideas, utopias and new solutions that answer old problems'⁶³¹. And she continues to explain that 'we wanted to open up a forum and [...] start a dialogue that – at least in part – would have created materials for the future exhibition of architecture'⁶³².

That the two forums were indeed also used to find 'unknown' contributors becomes evident in the following statement: 'As in the competition, *Expo On-Line*'s objective was to identify and produce a map of the world of international architecture. There were many unknown architects who having presented themselves for the competition were then selected for the exhibition'⁶³³. Through these two forums, Fuksas and Mandrelli could in fact draw from a pool of 840 architects or architectural practices and architecture students and student groups that were involved in these two preceding, web-based exhibition parts. Or, in the words of Doriana Mandrelli, these forums created an 'ongoing conversational interchange with (very) young architects'⁶³⁴.

Besides these two primary means of setting-up the exhibition experiment Fuksas main secondary means (secondary in a temporal sense) was the actual installation – the putting in place or arrangement – of the exhibition. The *Biennale* part that had been directly curated by Fuksas and Mandrelli, the actual exhibition *Less Aesthetics, More Ethics*⁶³⁵, was divided into two locations. On the one hand, the exhibition occupied the Italian Pavilion in the *Giardini* where it was placed in a more direct physical relation to the individual national pavilions with their independent exhibitions. The larger part of *Less Aesthetics, More Ethics*, on the other hand, was situated in the *Arsenale* complex

⁶³¹ MANDRELLI (2000). p428

⁶³² Ibid.

⁶³³ Ibid. p429

⁶³⁴ MANDRELLI (2000). p428

⁶³⁵ The site of the *Venice Biennale* exhibitions are traditionally the *Giardini di Castello* with their purpose build exhibition pavilions, but have always also took place in appropriated venues throughout Venice, where, during the last decade, the *Arsenale* developed as an equally important exhibition venue. With the *Arsenale* and its *Corderie* as exhibition venue, *Less Aesthetics, More Ethics* refers back to the *Biennale*'s first edition *La Presenza del Passato / The Presence of the Past* with its seminal installation *Strada Novissima*.

and here in the *Corderie* and the connected *Artiglierie*.

It has already been mentioned that this study focuses here only on this latter exhibition part in the *Arsenale*⁶³⁶. In regard of the installation that facilitated the experimental set-up of the exhibition one has to mention here two elements – firstly the space itself, and secondly the form of installation that drew heavily on techniques and forms deployed by art and performance installations. The *Corderie* and the *Artiglierie* allowed for the exhibition to be arranged along a linear narrative. The exhibition spaces themselves would tie the individual installations into one cohesive sequence. This was further strongly supported through the almost 300 meter long video wall in the *Corderie* that put all contributions here into a spatial relation to the video wall as well as into a topical context of the film sequences that were presented on this wall [see also below].

Furthermore, Marie-Anne Lories proposes that 'the *Arsenale* with its gigantic, unrefurbished spaces, [...], seemed to be predisposed for more profound and polemic positions'⁶³⁷. One could argue that the roughness of the then still unrefurbished building was indeed the preferable venue for the sort of laboratory that Fuksas tried to create with the exhibition⁶³⁸. While the interior spaces of the Italian Pavilion followed the rationale of the institutional and supposedly neutral 'White Cube', the *Arsenale* complex provided in some respect a reminder of the world and its contradictions to which the exhibition topic referred. Issues such as decay and reuse or recycling of infrastructure, of the past and the contemporary, of military/war and peace, of economic power and irrelevance were ever present in the buildings and outdoor spaces of the complex. The installations and the exhibition had thus a context and site specificity that could become part of the presented architectural experiment and/or proposition⁶³⁹.

⁶³⁶ This is partly due to the nature of the Italian Pavilion itself. The term 'pavilion' is here misleading. The building, which, with its rather labyrinthine arrangement of 33 rooms, would be better described as exhibition hall than as pavilion, makes the reading along any narrative almost impossible. Consequently, this part of *Less Aesthetics, More Ethics* presented itself more as an agglomeration of 26 independent installations by individual architects rather than one cohesive exhibition.

⁶³⁷ LORIERIS (2000). p121

[*L'Arsenale, avec ses espaces gigantesques, non réhabilités, [...], semblait indiqué pour des positions plus investies, plus polémique.*]

⁶³⁸ The *Arsenale* was already used in the previous year, 1999, for the *48th Art Biennale* curated by Harald Szeeman

⁶³⁹ As examples that worked specifically with the *Arsenale* context one could name here Hans Hollein's floating zen garden *Den-City*, Stalker's installation *Transborderline*, Otto Steidle's already mentioned *Nomad's Tower*, Arata Isozaki's *Project for World Peace*, or Casagrande and Rintala's *The Ship*.

It is precisely this aspect of site-specific installations that relates to the already mentioned affinity with art and the way contemporary art is installed in space. Molinari draws on this point when he writes that 'the experimental dimension of the architecture on show is strongly influenced by contemporary art, its languages and techniques, and is clearly distinct from the conventional paraphernalia of architectural thought'⁶⁴⁰. Fuksas' video wall sets the tone in this regard. The collage of moving images, stills and sound created through 39 synchronized projectors was in itself a form that was prior to this exhibition only seen in an art context or, although not at such a length, as part of theatre performances. *Less Aesthetics, More Ethics* used and displayed multi- or cross-disciplinary approaches blurring, in part, the differences between art and architecture.

How are various media used in order to materialize, test and mediate architectural propositions?

It lies within the nature of such a large exhibition like the *Architecture Biennale* that it uses more or less every conceivable medium, means or method in order to present and test its architectural propositions. The range is here from the paper-based architectural working drawing to computer simulation, from photography to film, from text to sound or from models to walk-in installations. It doesn't fall within the remit of this case study to analyse any particular means of individual exhibits by any of the contributing architects or artists. One can, however, dissect two such means that were prevailing in *Less Aesthetics, More Ethics*. These were all forms of digital media and films on the one hand and installations on the other – and in many case these two means were indeed combined.

It is again the 300-meter long video wall that formed the strongest expression of this combination between spatial installation and digitally mastered film projection⁶⁴¹. The film showed sequences from global metropolises, depicting issues such as environmental pollutions or catastrophes, conflicts and was, wealth and poverty, mass events, transport etc. Fuksas describes the incentive behind this film and the form of installation with the following words: 'The big, three hundred meter long screen, was for me an [art] installation. But it was the question, it was not the answer'⁶⁴². What Fuksas

⁶⁴⁰ MOLINARI (2000). p54

⁶⁴¹ The film script was written by Fuksas and Mandrelli, while Studio Azzuro worked on the actual synchronizing of the video projection.

⁶⁴² Excerpt from interview Massimiliano Fuksas, conducted 15.02.2006

calls here the presentation of the question could also be seen as the production and presentation of the exhibition's context and its discourse. Denis Moreau speaks here of 'the recomposing of a discourse that is sensitive, plastic and emotional'⁶⁴³. And for Molinari, the film was one decisive part that pushed the *Biennale* 'even to the point of nullifying the perception of the architectural object itself by a powerfully metaphoric reading of the phenomena under analysis'⁶⁴⁴. Yet for some, like Peter Murray 'the spectacular film' formed just 'the most memorable part of that show'⁶⁴⁵.

One has to also come back here to the already mentioned two web-based forums of the *Biennale*, the *Expo On-line* and the competition *Città: Third Millennium*. The 2000 *Architecture Biennale* was the first biennale to actively use the internet and its web presence as means to create a virtual exhibition and discussion forum prior, and in parallel, to the physical exhibition event. Mandrelli speaks here of the 'the web [as] an integral, or rather propaedeutic, part' [of the *Biennale*]⁶⁴⁶. It was the first architecture biennale to actively use a medium beyond the traditional exhibition medium in order to engage with a wider audience⁶⁴⁷. As a result they created a situation in which, as Molinari puts it 'people began talking about the event long before it was due – even before the projects began to arrive'⁶⁴⁸.

How does the exhibition use its temporality as well as its spatial and economic parameters in order to achieve its ends?

Temporality was predominantly an issue in the process of preparing the Biennale. One has to mention here in particular the two preceding web-based forums that were used as a form of laboratory in which the exhibition's topic was explored. Normally this preparatory process is hidden from the general public or even the contributing architects. In the case of the 7th Biennale, however, this process has been made visible. After the opening of the 'physical' Biennale, the temporality had only a relevance to very few individual installations that depended on a transformation over

⁶⁴³ MOREAU (2000). pp74-75

⁶⁴⁴ Ibid. p54

⁶⁴⁵ MURRAY (2006)

⁶⁴⁶ MANDRELLI (2000). p429

⁶⁴⁷ This form of engagement as only, partly, been picked up again by the 2006 Biennale 'Cities – Architecture and Society' where several blogs either reported from the Biennale. However, these were usually initiated and maintained by existing architectural web-forums/journals and/or were national architecture centres/initiatives.

⁶⁴⁸ MOLINARI (2000). p54

time or had specific events incorporated.

Given the sheer size of the exhibition venue one can hardly speak of spatial limitations. Both the *Giardini* and the *Arsenale* were large enough for 1:1 installations or even little buildings, either interiorly or exteriorly. However, once again one can mention here the web-presence of *Less Aesthetics, More Ethics* that extended the *Biennale* spatially into the virtual realm and thus beyond its confines of Venice and the *Biennale* exhibition venues.

How do 'elements of uncertainty' or 'risk', incorporated into the exhibition, affect the implementation, perception and result of the exhibition?

It is Fuksas himself who postulates that 'we must counter the [profession's] certainties with 'uncertainties'⁶⁴⁹. In order to approach the issues and problems identified by the *Biennale* architects and those involved in the production of architecture have to leave their secured positions and enter into unknown territory. But as Fuksas also assesses, he discovered 'that out of a lot of architects, only a few were ready [for this challenge]⁶⁵⁰. The uncertainties were thus also embedded in the production process of the *Biennale* itself. Fuksas selected and invited or commissioned architects to the *Biennale* rather than selecting specific work for the exhibition. The works or installations that formed part of the exhibition were, although certainly discussed between Fuksas, his curatorial team and the individual architects, not seen by Fuksas prior to the exhibition. The curators could neither be sure of the quality of the work nor be certain of their final form and the exhibition could therefore not be preconceived in every detail.

How does the exhibition form an integral and critical part of the architectural praxis?

The *Venice Architecture Biennale* is, with no doubt, the most important reoccurring exhibition event for architecture. It creates a forum of professional and intellectual exchange that is unrivalled. It is a place and occasion in which architects can present and test new and existing works to a professional and lay audience. As an event it is discussed and reviewed in professional publications as well as in the daily press. In the specific case of *Less Aesthetics, More Ethics* the *Biennale* has extensively been used by architects to create new work and to engage with the questions set by Fuksas and the *Biennale*. One can also mention here again the open competition that preceded the

⁶⁴⁹ FUKSAS (2000). p12

⁶⁵⁰ Excerpt from interview Massimiliano Fuksas, conducted 15.02.2006

exhibition and which used a form of generating and testing work that is integral part of the normal architectural praxis.

Typological context of the exhibition

How does the exhibition fit into the typological categorisation of Laboratory Exhibitions as explored in PART II?

Less Aesthetics, More Ethics was first and foremost a 'Curated Architectural Laboratory'. The above section on the 'Processes and Form of the Exhibition' has already pointed out the means through which the Biennale in general and this 7th Biennale in particular were made a 'Curated Laboratory'. The first means is the positioning of a theme or hypothesis and formulation of a research question through the director or curator of *Less Aesthetics, More Ethics*, - Massimiliano Fuksas. The 'set-up' of the exhibitions agenda provoked the invited architects to respond with experimentations, deliberations, or propositions to this hypothesis that made the 7th Biennale a 'laboratory of ideas' as Fuksas calls it⁶⁵¹. The second means is the actual selection of the contributing architects and artists and the processes how this selection came about through which Fuksas curated the laboratory. By selecting his 'team of researchers or laboratory workers' – the architects – Fuksas, as the curator, consequently affected the set-up of the entire experiment of the exhibition. The third means is the actual installation – the putting in place or arrangement – of the exhibition through the curator and his team.

However, besides falling into the category of the 'Curated Architectural Laboratory', *Less Aesthetics, More Ethics* further qualifies, at least in parts of the exhibition, for the two other categories, - the 'Laboratory in Real-Scale' and the 'Place of Architectural Production'. Several contributions to the 7th Architecture Biennale were either spatial installations within existing spaces – one could name here Arata Isozaki's *Transcendental Architecture - A Project for World Peace*, Gary Chang's *Cage Houses*, Philip Gazeau's *Mutation-Desire* or indeed Fuksas' 300 meter long video wall in the *Corderie*⁶⁵² – or 1:1 buildings or built objects – one could name here Hans Hollein's *Den-City* floating zen garden, Otto Steidle's *Nomad's Tower*, Stalker's *Transborderline*, Studio Casagrande's *60 Minute Man*, or Fuksas' and Mandrelli's *Peace Centre* in the

⁶⁵¹ FUKSAS (2000). p12, p16

⁶⁵² See MANDRELLI (2000). for Isozaki, see p218; Chang, p58; Gazeau, p208; Fuksas, throughout

*Giardini*⁶⁵³. The experimentation was here conducted through the production of these installations or, mostly temporary buildings. However, these forms of contributions were not in the majority of exhibited works. In that respect one could only call several contributions within the Biennale and not the whole exhibition a 'Laboratory in Real-Scale'.

The category of the 'Place of Architectural Production' applies predominantly to the very public process of generating and producing content for the *Biennale*. This includes here the on-line forum and the ideas competition as it has been described above. It further includes individual country contributions like for instance that of France that had, beside the exhibition in their pavilion in the *Giardini*, a floating vaporetto that was a forum in which invited speakers and a changing audience would deliberate on the ethics of architecture⁶⁵⁴. One could argue that this refers back to the function of the *museion* or even the earliest academies as they have been described in Chapter 5.

How do historical precedents such as the described studiolo, Kunstkammer, cabinet de curiosité, museum, academy, studio, world exposition, building exhibition, installation, or elements thereof, relate to this specific exhibition?

The *7th International Architecture Exhibition – Less Aesthetics, More Ethics* stands of course in the tradition of architectural biennales and here of the *Venice Biennale* in particular. As it has been already explored in Part II, Chapter 6, the architecture biennale developed from the much older Venice art biennale, the model of all succeeding art and architecture biennales. It has also been already been explored that this exhibition format relates closely to the expositions that were introduced in mid-19th century.

A particularity of biennials in comparison to exhibitions of architectural museums or institutes lays within the usually changing curatorship and organization team from one show to another. This implies that each biennial is always a completely new conception, following its own intrinsic ideology, trying to distinguish itself from the previous exhibition. Rather than being part of a continuous exhibition programme that reflects a mid- to long-term exhibition strategy or policy devised by an exhibiting institution like, for instance, an architecture museum, the new biennial and its curators are forced to conceptually and financially out-do its predecessor.

⁶⁵³ See MANDRELLI (2000). for Hollein, see p92; Steidle, p260; Stalker, p256; Studio Casagrande, p46; Fuksas p424

⁶⁵⁴ The French contribution was curated by François Geindre, Henry-Pierre Jeudy, Jean Nouvel and Hubert Tonka. See Molinari (2000). p55

In that respect, *Less Aesthetics, More Ethics* is less referring to its predecessors but rather tries to distinguish itself from them. However, despite the aim to create a distinguishable exhibition event and to formulate and present a discrete conceptual message or idea there are nevertheless reference points between the different Venice Biennales. Capezzuto et al, for instance, see the '*Strada Novissima* conceived for the 1980 Biennale by Paolo Portoghesi [...] as a veritable model, or even a sort of anticipation of Fuksas' [...] idea of using a space that isn't just the three-dimensional translation of a magazine, but also a lived device that allows the visitor to actually enter a world with their body and senses' They further constitute that such a device is 'not just a physical landscape but also a mental one'⁶⁵⁵.

Besides the obvious tradition of the biennials, one could identify here another tradition that has been dealt with in Part II and to which a certain relation exists in terms of the selection and curation of the exhibition content. It is here the tradition of the architectural museum that started with Alexandre Lenoir's *Musée des antiquités et monuments français* in the former Convent of the Petits Augustins in Paris. For his museum, Lenoir followed a clear curatorial concept that was supported by a specific ordering and display technique in which he created new knowledge and 'new meaning'. This is not dissimilar to the approach by a *Biennale* curator or in this case Massimiliano Fuksas and *Less Aesthetics, More Ethics*.

⁶⁵⁵ CAPEZZUTO et al (2004). p47



Figure 68: Less Aesthetics, More Ethics - Expo Online, one of the preparatory tools of the 7th Architecture Biennale.

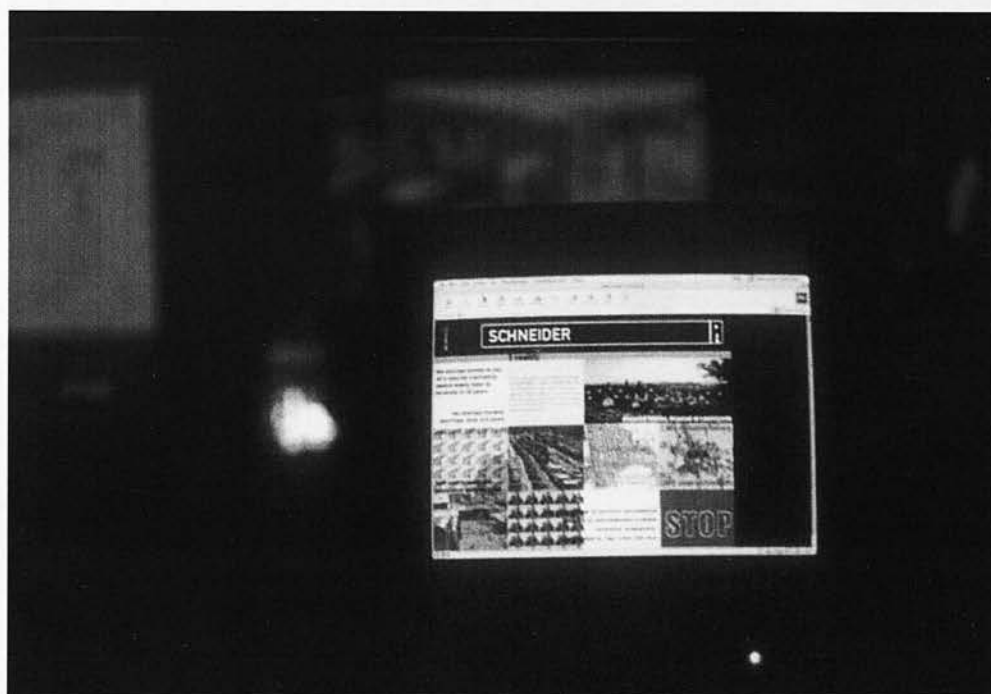


Figure 69: Less Aesthetics, More Ethics – Presentation of the selected entries of the competition Città: The Thrid Millennium in the Italian Pavilion.



Figure 70: Less Aesthetics, More Ethics – French Pavilion in the Giardini showing nothing but writings on the wall.



Figure 71: Less Aesthetics, More Ethics – The French Vaporetto mooring in front of the Giardini. The boat is used for a series of discussions on the biennale's topic.

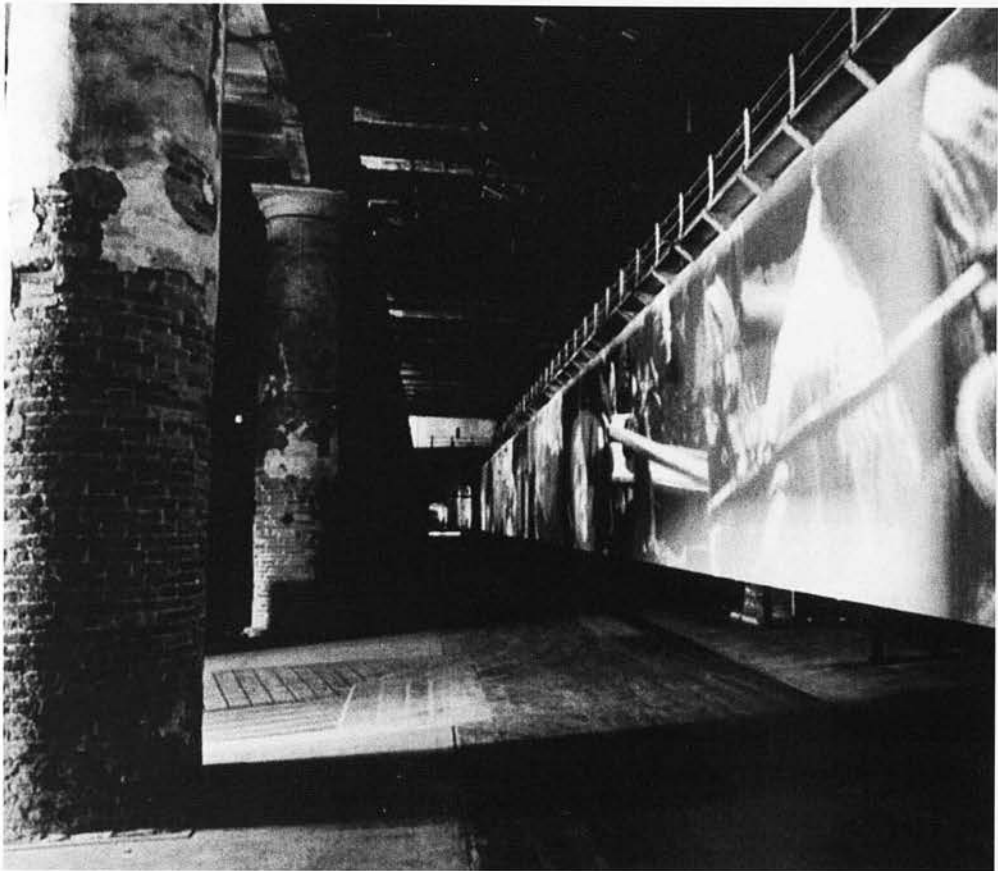


Figure 72: Less Aesthetics, More Ethics – The 300 meter long video wall by Fuksas and Mandrelli in the Corderie of the Arsenal.

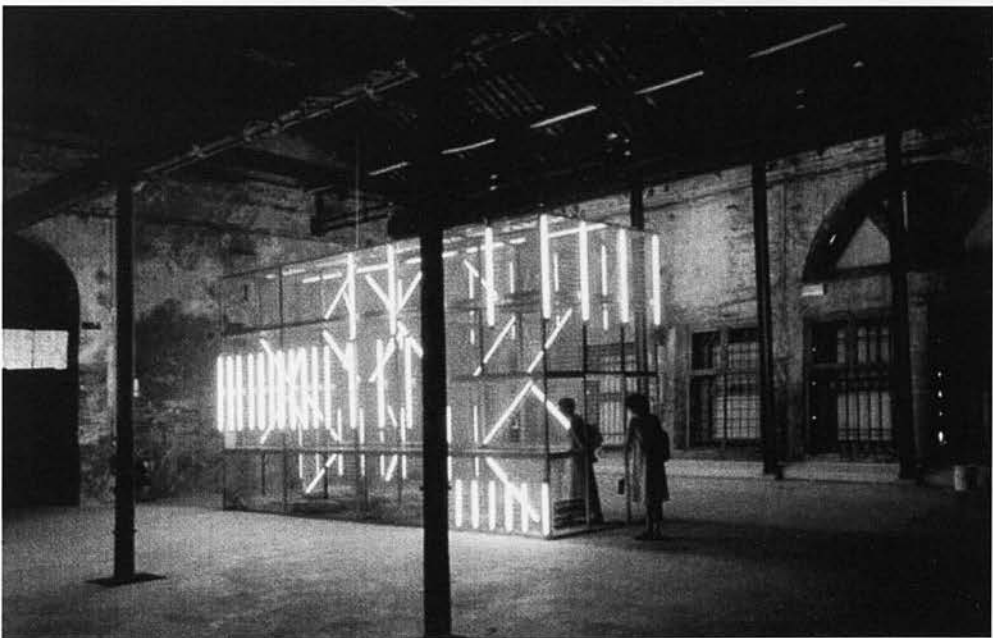


Figure 73: Less Aesthetics, More Ethics – Strangled Vision: Hong Kong, a Hidden Locality by Gary Chang / Edge Architecture. The installation refers to the so-called 'cage houses', cramped into residential blocks of Hong Kong.

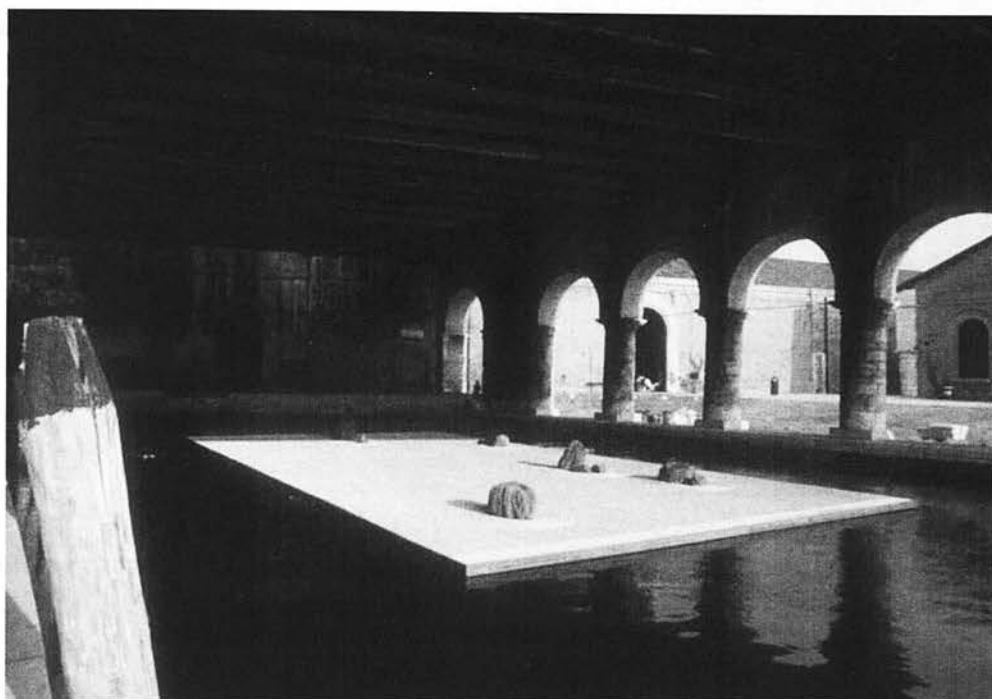


Figure 74: Less Aesthetics, More Ethics – Floating Zen garden Mass and Void - Density in Emptiness by Hans Hollein in the Gaggiandre of the Arsenale.

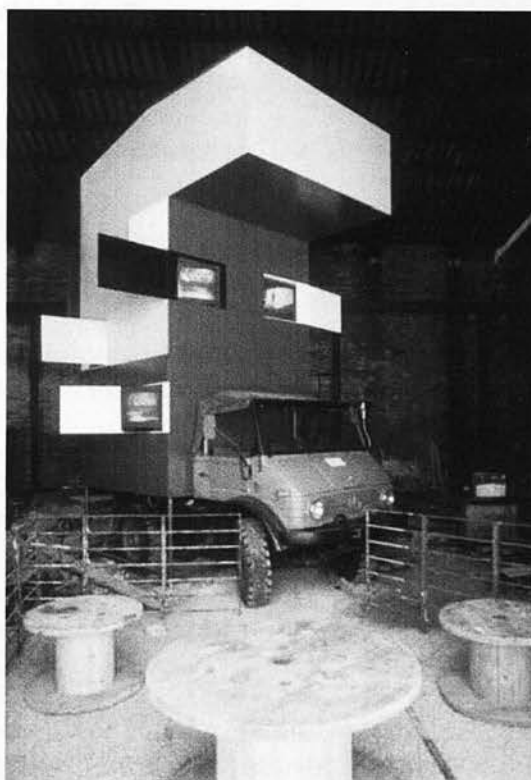


Figure 75: Less Aesthetics, More Ethics – The Nomad's Tower by Otto Steidle, seen as a paradox hybrid between static urban tower and movable rural vehicle.

CHAPTER 12 – *Urban Cabaret* - Architecture is a Political Act

GLAS has always been about creating alternative spaces for its members and collaborators. Spaces to think freely, to re-imagine our cities and landscapes, to challenge preconceived notions and to enjoy the benefits of collective effort

Allan Atlee, GLAS member on GLAS⁶⁵⁶

GLAS' interests are a lot more political than mine. They are much more to do with the city and the streets, and in that way they remind me of the Paris Radicals of 1968

Peter Cook in an interview with Caroline Ednie⁶⁵⁷.

Exhibition data:

Exhibition Title:	<i>Urban Cabaret</i>
Architect(s):	G.L.A.S. – Glasgow Letters on Architecture and Space Ltd. Allan Atlee, Judith Barber, Jason Bell, Gary Boyd, Jonathan Charley, Alistair Clements, Tony Dunworth, Florian Kossak, Carole Latham, Rosalie Menon, Alan Pert, Tatjana Schneider, Adrian Stewart
Curator:	G.L.A.S.
Exhibition Designer:	G.L.A.S.
Others involved:	Scottish Arts Council (funding), Reliant Cars (in-kind support) The Lighthouse (facilitated launch), Citizens of Glasgow
Exhibition Date (s):	14 – 29 September 2001
Exhibition Venue(s):	various
Venue Type:	locations in the public realm of Glasgow (street corners, shopping centres, public squares, housing estates etc)
Exhibition Sub-type:	Laboratory in Real-Scale; Place of Architectural Production Mobile installation, propaganda vehicle
Source material:	
Interview:	-
Press Text:	<i>(glaspaper 01 – Urban Cabaret)</i>
Catalogue:	<i>glaspaper 01 – Urban Cabaret</i> and <i>glaspaper 02 – Movement and Transport</i>
Web Site:	www.glaspaper.com (downloads for PDFs of <i>glaspaper</i>) Original website: www.glas-collective.com not longer functional
Other Key References:	HAYDEN, Florian, TEMEL, Robert (eds) (2006). <i>Temporary Urban Spaces</i> . Birkhäuser: Basel, Boston, Berlin aaa/PEPRAV (eds.) (2007). <i>Urban Act</i> . Atelier d'architecture autogérée: Paris

⁶⁵⁶ Allan Atlee, on scottisharchitecture.com. Sourced from: <http://www.scottisharchitecture.com/article/view/2004+Lighthouse+Achievement+Award+Winner> [Last accessed: 07.06.2008]

⁶⁵⁷ Interview Caroline Ednie with Peter Cook, conducted 18 June 2004. Sourced from: <http://www.scottisharchitecture.com/article/view/Interview+with+Peter+Cook> [Last accessed: 16.06.2008]

Author's Role:

I was a founder member of the co-operative G.L.A.S.. In regard of the exhibition *Urban Cabaret* I was jointly responsible for the exhibition concept, the exhibition design and its production – and here the publication *glaspaper 01* in particular. Furthermore, like all GLAS members, I was involved in the actual operation or staffing of the exhibition in order to engage with the targeted exhibition audience. For *glaspaper 02* I have written 'Urban Cabaret – A Resumé' which is quoted in this study.

Subjects of the exhibition

Who are the primary producers?

G.L.A.S. has described itself as 'a workers co-operative of architects, teachers, writers and urban activists committed to fighting socio-spatial inequality and challenging the capitalist character of how we make and experience buildings and cities'. It consisted of teachers and ex-postgraduate students from the Department of Architecture at the University of Strathclyde who, after working informally together since 1997, founded G.L.A.S. in 2001.

Through a series of design seminars, educational workshops and publications or exhibitions G.L.A.S. addressed in its work issues such as urban poverty, the intrusive use of surveillance, or the relentless privatisation of the built environment. At the same time G.L.A.S. championed the historic struggles of architects, construction workers and tenants to carve in the interstices of capitalism embryonic forms of new social space and building production. To this end G.L.A.S. offered free professional advice to social groups engaged in struggles to take control of their environment like those involved in the campaigns against housing stock transfer, the closure of public swimming pools, and the expansion of motorway construction. The most prominent and continuous activity of G.L.A.S. has been the publication of the journal *glaspaper* of which G.L.A.S. produced ten issues.

Whilst based in Glasgow, G.L.A.S. has also carried out work in other parts of the UK as well as abroad including places such as Munich, Berlin, Dessau, or Dublin. G.L.A.S. has been supported in this work by official bodies like the *Scottish Arts Council*, *The Lighthouse*, the *British Council* and the *RIAS* as well as by numerous individuals and institutions. In accordance with its initial manifesto as a temporary organisation, G.L.A.S. closed in 2005.

The work and approach of G.L.A.S. gained national and international, professional and public recognition and acclaim, most notably through winning the inaugural *Scottish Achievement Award in Architecture* in 2004. In his award speech, Stuart MacDonald, director of *The Lighthouse* said about G.L.A.S.: 'GLAS fulfil a much-needed gap in the architecture scene in Scotland. As an agitprop group they awaken us to sometimes uncomfortable issues. And, they demonstrate in a way that avoids being patronising or "dumb down", how you can work creatively with excluded or minority communities. [...] GLAS remind us architecture is about more than icon signature buildings. They are

networked in a very real sense⁶⁵⁸. Wolfgang Bachman, editor of the German architecture journal *Baumeister*, lauded G.L.A.S.' uncommon political approach to architecture: 'G.L.A.S. regards architectural process as politically motivated and thus tries to influence its politics. With this discourse, [*glaspaper*] is, in contrast to the elitist positioning of other theoretical journals, rather unique⁶⁵⁹. This is a characteristic that has also been stressed by Peter Cook who remarked in an interview that '[G.L.A.S.] interests are a lot more political than mine. They are much more to do with the city and the streets, and in that way they remind me of the Paris Radicals of 1968⁶⁶⁰. Finally, James Pallister of the Architect's Journal comments on G.L.A.S.' direct involvement with topical issues and conflicts in various communities: 'G.L.A.S. wasn't afraid of getting its hands dirty⁶⁶¹.

For *Urban Cabaret* G.L.A.S. acted as curator of the two week event and developed as well as executed the whole project. Within the group itself, different members took responsibilities for different tasks and work aspects. However, in accordance with the cooperative's collective spirit these were not publicly identified. G.L.A.S. acted also as exhibition designer, designing the main exhibition means, a transformed three-wheeler Piaggio Ape.

Who are the secondary producers?

G.L.A.S. aimed to deliberately engage with an audience that was as wide and divers as possible and that would go beyond the usual professional audience for architectural exhibitions. Specifically *Urban Cabaret* was addressed at 'groups currently involved in struggles to protect or transform their environments' as well as '[...] the population living on the physical and social periphery that find themselves excluded from modern city life⁶⁶².

However, besides this deliberate engagement with a non-professional, in part

⁶⁵⁸ Sourced from:
<http://www.scottisharchitecture.com/article/view/2004+Lighthouse+Achievement+Award+Winner>
[Last accessed: 16.06.2008]

⁶⁵⁹ BACHMAN, Wolfgang (2002). 'Editorial' in *Baumeister* 12/02. p1

⁶⁶⁰ Interview Caroline Ednie with Peter Cook, conducted 18 June 2004; sourced from:
<http://www.scottisharchitecture.com/article/view/Interview+with+Peter+Cook>
[Last accessed: 16.06.2008]

⁶⁶¹ PALLISTER, James (2007). Review of GLASmanual in: *AJ* 06.09.07. p47

⁶⁶² GLAS (2001) *glaspaper* 01. p5

marginalized audience, G.L.A.S. had also sought to challenge their own peers through this exhibition praxis. According to G.L.A.S., '*Urban Cabaret* is here to show others within and without the architectural profession that things can be done differently'⁶⁶³.

Urban Cabaret had a two-way strategy in regards of its audience. On the one hand, '*Urban Cabaret* [offered] 'ways of seeing' [that aimed to] encourage individuals and social groups to interpret their own surroundings within the context of the political and economic forces which shape modern landscapes'⁶⁶⁴. Through *Urban Cabaret* G.L.A.S. intended 'to raise the horizons of expectation amongst Glasgow's Citizens in regard to what their city could be like'⁶⁶⁵. This is a clearly educational and empowering aspect of the project and the audience is in this instance the recipient of the mediation. On the other hand G.L.A.S. acted also as the recipient, gathering information from the audience on local problems, initiatives and struggles with the transformation of the urban environment. In both cases *Urban Cabaret* functioned only through the engagement or involvement of the audience.

Ultimately, G.L.A.S. used *Urban Cabaret* 'to encourage individuals and groups to engage with G.L.A.S.' activities and help to establish new networks within Glasgow, Scotland and further a field around Europe [with the aim] to share good practice and work together to transform our everyday environments'⁶⁶⁶.

Object of the exhibition

What is the exhibition topic / nature of the emerging architecture?

According to the project's proclamation printed in *glaspaper 01*, which was distributed as part of the exhibition event, *Urban Cabaret* '[...] aimed to highlight spatial inequality and injustice, champion social struggles centred around buildings and the environment, and highlight ideas which promote a rethinking of how we could make buildings and cities in more cooperative ways for the benefit of all who use them'⁶⁶⁷. It was further stated that *Urban Cabaret* aimed '[...] to denounce specific contradictions and injustices

⁶⁶³ GLAS (2001) *glaspaper 01*. p5

⁶⁶⁴ Ibid.

⁶⁶⁵ Ibid.

⁶⁶⁶ Ibid.

⁶⁶⁷ Ibid.

in our city. This includes the privatisation of space, the surveillance of the public realm, the tyranny of retail, the manifestations of gender, racial and class discrimination, the ownership and control of the city itself and the means of producing it'; '[...] to challenge the glaring contradictions and inequalities which exists within the built environment of our cities in general and of Glasgow in particular'; and '[...] to promote [the peoples'] rights to the city, [... including] the right not to be continually monitored by CCTV cameras, [...the] right to affordable housing, [...the] right to sufficient community facilities, [...the] right to protest and congregate everywhere in the city'⁶⁶⁸. All these aspects clearly imply a political understanding of architecture and the production of it. Ultimately, the exhibition's subject-matter was to challenge the prevailing politics of architecture and suggest an alternative.

As for G.L.A.S.' and *Urban Cabaret*'s understanding of architecture it is best to quote from the introduction to *glaspaper 01*: 'Architecture, building and urban design has always been a political activity; the task remains to change its politics. In the same manner that the Anti-Capitalist Movement is taking on the institutional power of global finance capital, the idea that the construction of giant specifically capitalist complex commodity is the only legitimate way of organising the built environment needs to be seriously challenged. We would like to think that the G.L.A.S. project was a modest contribution to that on-going struggle'⁶⁶⁹

What is the architectural research that is conducted through the exhibition?

One can identify two main, interrelated, strands of architectural research concerning a subject-matter on the one hand and a form of praxis on the other. The first strand is the inquiry about issues relating to the built environment that concern people who normally do not get a voice in the architectural and urban discourse on the city. As such the research was directed towards gathering information from the audience on local problems, initiatives and their struggles with the transformation of the urban environment. The second strand is a form of action research in which G.L.A.S. experimented with new forms of engagement, tested various forms of mediation with the aim to establish an alternative form of architectural praxis. Both these strands were aiming to find ways in which G.L.A.S. could establish connections and tap into existing networks within Glasgow, Scotland and further a field around Europe in order to work together in transforming the environment of the everyday.

⁶⁶⁸ Ibid.

⁶⁶⁹ GLAS (2007) *Glasmanual*. GLAS: Glasgow

Processes and form of the exhibition

How is the exhibition 'set-up' in order to provide the testing ground for the architectural research?

G.L.A.S. had developed three main forms of installations or exhibition set-ups for the *Urban Cabaret*. These were called 'PIT STOPs', 'URBAN HITs' and 'DRIVE BYs'. In *glaspaper 01* these were described as follows: 'PIT STOPs will happen in local neighbourhoods as well as in prominent city centre locations. Here *Urban Cabaret* wants to invite you to look at our mounted exhibition, engage in a discussion or simply offer you a cup of tea. Our *Urban Cabaret* activists will distribute free copies of *glaspaper*; URBAN HITs are short staged events around or at a specific building that is either a cause or manifestation of the spatial and social inequality of our city. The settings will be formed by the Ape van, banners, sound and the *Urban Cabaret* activists; DRIVE BYs will be more or less random events. The Ape van on the move, a literally mobile exhibition. Some of the DRIVE BYs will be sound supported, others may use a projector to transform the immediate surrounding that is passing by'⁶⁷⁰.

As main exhibition structure G.L.A.S. and *Urban Cabaret* had utilised, the already above mentioned, bright red Piaggio Ape three wheeler van that could act as a mobile exhibition device, carrying a set of twelve mis-used record boxes that contained newspapers, postcards, cushions and a sound machine. The boxes could create a newsstand, a group of seats, a message system or a spatial intervention. The Ape itself had four white translucent panels with lettering on the back and would glow at night. The panels could slide up to form a three-dimensional signboard enhancing the visual impact of the relatively small Ape.

The Ape was placed at strategic places such as a local street corner, the entrance of a shopping mall or the centre of a little square make contact with as many people as possible. On some occasions the Ape was just positioned for a photo shoot in front of a building pointing a bright red arrow at the causes and consequences of inequality, repression and segregation within the city.

Doing all that, the Ape and *Urban Cabaret* became a travelling, propagandistic display unit that would invite passers-by to engage in a discussion about buildings and the use of them. Bringing an exhibition, the opportunity to discuss urban issues and the *glaspaper* to the various communities around Glasgow rather than expecting people to come to a static 'professional' venue was in this regard crucial.

⁶⁷⁰ GLAS (2001) *glaspaper 01*. p5

G.L.A.S. explained the cabaret aspect *Urban Cabaret* in the following passage: 'Traditionally a cabaret is a place which entertains an audience through various media and performances while they are being served with drinks and snacks at their seats and tables. In that respect *Urban Cabaret* fulfilled all these criteria. But most of all it was the context that produced the cabaret. A group of strangers with a funny red vehicle standing at a corner in Possil, Pollok or Parkhead, serving tea and distributing a newspaper with no football page or a 'page-three-stunner', discussing capitalist contradictions in front of a private shopping centre, playing reggae music was cabaresque in itself'⁶⁷¹.

How are various media used in order to materialize, test and mediate architectural propositions?

One can discern several complementary media here. These are:

- G.L.A.S. members

Although a number of props or elements were needed in order to spatially set *Urban Cabaret* and to produce an exhibition in the first place, it was the actual presence of G.L.A.S. members during the individual events that was paramount as means to engage with the audience and in effect to conduct the research and experiments that *Urban Cabaret* set up for. At each location and event between 2 and 6 members of G.L.A.S. were present at any one time to engage in discussions, distribute *glaspaper*, operate the Ape and install or demount *Urban Cabaret* in a specific location. As an exhibition that was predominantly focused on participation and interaction between exhibitor and audience, the G.L.A.S. members became an absolute vital part of the exhibition installation.

- The Ape

As main exhibition device or carrier, G.L.A.S. had utilised a bright red three-wheeler van, the Piaggio Ape⁶⁷², which acted like a mobile float as propaganda vehicle not unlike floats used in Revolutionary Russia in the early 1920s, it also related to mobile infrastructure such mobile libraries or mobile cinemas. Additionally the loading bay of the Ape acted as a carrier for all other props that were utilised for each individual

⁶⁷¹ KOSSAK, Florian (2001). 'Urban Cabaret – A Resumé' in *glaspaper 02*. GLAS: Glasgow. p22

⁶⁷² In 2001 the Piaggio Ape was still a very uncommon sight on British streets, in Glasgow in particular. Since then Apes have increasingly been used as a mobile 'Italian' coffee outlet or a novelty advertisement vehicle. One should note that the use of the Ape in a country like Italy where this vehicle originates from and it is a very common sight in every town would not have worked as a means to get any attention.

Urban Cabaret installation. While driving through the streets of Glasgow, the vehicle would act similar to a mobile billboard van in miniature. Once static and placed within a specific designated location the van would provide the framework for each exhibition installation.

- Display Boards

Attached to the loading bay of the Ape were four white translucent panels. The panels could either form a solid box (covered by a white plastic roof) or individually slide up to form a three-dimensional sign board enhancing through its gained height the visual impact of the small Ape as well as revealing the inside of the loading bay. The boards were the carriers of the primary exhibition messages including the 'Red Arrow', a map of Glasgow and a manifesto. Light tubes on the inside of the van would allow the display to glow magically at night.

- Record Boxes

'Twelve 'mis-used' record boxes contained newspapers, postcards, cushions and a sound machine. The boxes could create a newsstand, a group of seats, a message system or simply a spatial intervention'⁶⁷³. The twelve black or red boxes had one vinyl letter each on their front that read together U.R.B.A.N. C.A.B.A.R.E.T. and thus acted as signage and additional information about the project. Alternatively the boxes could be rearranged to form statements such as U.R.B.A.N. A.C.T. or denote the additional function of an U.R.B.A.N. T.E.A. B.A.R.. [see Figure 78 and Figure 79]

Together, these three elements – Ape van, display boards and record boxes – could be transformed and combined in almost infinite variations and thus react to specific localities, programmes and audiences.

- Glaspaper

The main media of distributing G.L.A.S.' and the exhibitions' idea to the audience was the free publication *glaspaper*. *Glaspaper 01* contained on the one hand information about G.L.A.S. and Urban Cabaret and the invitation to join G.L.A.S. in the struggle to challenge the hegemony of a normative/capitalist mode in which our cities are produced and used. On the other hand, *glaspaper 01* featured already two of the 'highest profile building struggles in Glasgow's recent history' namely the fight to save the local Govanhill Pool from permanent closure and the city council's proposed housing stock transfer. *Glaspaper* used deliberately a tabloid format that was, apart

⁶⁷³ KOSSAK (2001). p22

from being cheaply produced, familiar to everyone and distinctive from the normal glossy magazine of the profession – a factor that was very important in order to find a way in which G.L.A.S. could engage with a non-professional audience.

How does the exhibition use its temporality as well as its spatial and economic parameters in order to achieve its ends?

Urban Cabaret lasted for a relatively short period of 17 days with a concentration of events around three long weekends (Thursday – Sunday)⁶⁷⁴. On these weekends *Urban Cabaret* toured the city usually from 10am to 5pm with some additional night events. Each of these days between four and seven planned stops with stationary installations were held with some additional unplanned 'Drive-Bys'. Each individual event lasted between half hour and half a day.

The short period of time that *Urban Cabaret* was stationed in any one location inevitably led to a very haphazard or random encounter with a passing audience unless specific arrangement had been made with a group identified prior to the actual event. The time of the day of each stationary installation of *Urban Cabaret* also led to a varying degree of successful or less successful interaction with a passing audience.

Some moments and locale that G.L.A.S. anticipated in the planning phase of *Urban Cabaret* to be prone for a lot of audience contact proved to be less successful. A high street such as Sauchiehall Street or Buchanan Street at lunchtime was, against expectations, not a place to attract many people as everyone was just rushing from one place to another.

Depending on the definition of whether the spatial situation of *Urban Cabaret* was constituted by the whole city of Glasgow (or even Glasgow as place-holder for our contemporary city) or by a specific location within this city in which G.L.A.S. and *Urban Cabaret* made a temporary stop to put up its temporary exhibition, the question of 'spatial limitations' changes.

The Ape itself, the display boards and the props that the Ape contained were relatively small exhibition devices. The city, but also several concrete spatial situations such as George Square, were in comparison vast. The spatial, and consequently overall impact that *Urban Cabaret* had as an installation and exhibition device was hence depending,

⁶⁷⁴ The concentration on the weekends was also due to staffing issues as most G.L.A.S. members were in some sort of full-time employment.

among other things, on the concrete spatial situation.

The question whether G.L.A.S. and *Urban Cabaret* would have achieved more or different results with additional funds available is near impossible to estimate. What went hand in hand with these limited financial resources are G.L.A.S.'s 'amateurish' character and the fact that labour was entirely provided on a voluntary basis without any remuneration. The positive feedback that G.L.A.S. and *Urban Cabaret* got from its audience was clearly to a large extent due to the fact that *Urban Cabaret* was an altruistic event and that G.L.A.S. was not related to any (discredited) professional or institutional body or indeed the Glasgow City Council.

How do 'elements of uncertainty' or 'risk', incorporated into the exhibition, affect the implementation, perception and result of the exhibition?

G.L.A.S. had no immediate predecessors to relate to that had done a similar work or projects in recent times and within the context of Glasgow⁶⁷⁵. The reference points for the group as well as for *Urban Cabaret* were rather historical examples. There was therefore no guarantee that the approach that G.L.A.S. took with *Urban Cabaret* would work in the 2001 and within the cities context.

Furthermore, *Urban Cabaret* was the first exhibition project of the newly formed group. Individual group members had done exhibitions and similar projects prior to the foundation of G.L.A.S. but *Urban Cabaret* presented the first opportunity where the group could test both their mode of praxis as a collective as well as implement intellectual concepts that had been formulated by members in previous years.

Although the set of various *Urban Cabaret* activities ('Pit Stop', 'Urban Hit', 'Drive By' or 'Projection') had been planned in principle and locations had been identified prior to the event, each set-up of the *Urban Cabaret* installation was a first with no time available for experimentation or testing prior to the actual individual event. Adjustments to each particular situation, spatially and socially, thus had to be made on the spot according to whatever the G.L.A.S. members in charge encountered at each location. This spontaneity created 'elements of uncertainty' throughout the whole period of the event.

Urban Cabaret's attempt to bring architecture and the debate about the production of the build environment to the whole city and in particular to those citizens generally

⁶⁷⁵ G.L.A.S. was aware of similar activities on the European continent, in particular Germany and Austria. However, also in these countries exhibitions or temporary installations along the lines of *Urban Cabaret* have only come to fore in the last 5 – 7 years. See here HAYDEN, Florian and TEMEL, Robert (2006). *Temporary Urban Spaces*. Birkhäuser: Basel, Berlin

excluded from a discourse that happens, quite literally, in our (architectural) centres was as ambitious as it was prone to be limited in its overall impact – a limitation that was acknowledged by G.L.A.S right from the outset⁶⁷⁶. As such there was always an inherent 'risk' of failure between outset of the project and means available.

How does the exhibition form an integral and critical part of the architectural praxis?

First and foremost Urban Cabaret acted as the catalyst for the establishment of G.L.A.S.' praxis. *Urban Cabaret* had the declared aim to connect with other groups and individuals within Glasgow and beyond to establish further working relationships. Urban Cabaret was used to identify further fields of activity and engagement for the group.

It further tested and established a way of working that should be repeated in other areas, cities, at other occasions. Ultimately, activities such as *Urban Cabaret* were the praxis of G.L.A.S.. They were not only a means to an end or a testing ground for a different kind of work but they were the actual, experimental praxis of G.L.A.S..

Typological context of the exhibition

How does the exhibition fit into the typological categorisation of Laboratory Exhibitions as explored in PART II?

Urban Cabaret is both a 'Laboratory in Real-Scale' as well as a 'Place of Architectural Production'. *Urban Cabaret* is a 'Laboratory in Real-Scale' as it was not a scaled-down version that referred to something else to come. It was, in its physical set-up as much as through its actual praxis, exactly meant as it appeared. G.L.A.S. experimented with its real praxis and tested it, for the first time, through *Urban Cabaret*. All props or exhibition devices and their installation in space where hereby also 'in real-scale' despite the fact that they were small (as for instance in the case of the *Ape*).

At the same time it was a 'Place of Architectural Production' as G.L.A.S. took its actual praxis onto the road and into the urban realm of Glasgow. The experimentation with architecture through its production is hereby twofold. Firstly, it is the production of specific spatial and social arrangement in which *Urban Cabaret* engaged with its audience. It overlaps here with the above mentioned installation aspect that relates to

⁶⁷⁶ See here the editorial to *glaspaper* 01 in which Jonathan Charley writes that 'the effect a small organisation like G.L.A.S. can have on some of the profound socio-spatial contradictions thrown up by the consequences of neo-libertarian economic regimes [...] is of course strictly limited'. CHARLEY, Jonathan (2001). 'GLAS' in *glaspaper* 01. p2

the 'Laboratory in Real Scale'. But while the one focuses on the actual spatial and social situation, the emphasis is here on the production of this very spatiality and social construct. Secondly, it is the experimentation of different forms and methods of engaging with a public in order to present and discuss architecture, in consequence to produce a different architecture through a change in perception.

How do historical precedents such as the described studiolo, Kunstkammer, cabinet de curiosité, museum, academy, studio, world exposition, building exhibition, installation, or elements thereof, relate to this specific exhibition?

Urban Cabaret and its vehicle, the appropriated Piaggio Ape, relate to the aforementioned installations in the public realm and here in particular to the politically motivated, theatrical installations, aparati and information stalls of Russian Constructivists such as Aleksandr Rodchenko, Lyubov Popova, or Gustav Klucis. Superficially the reference is here in the use of the colours red, black and white, in the moving planes and visible construction, but more importantly it is in the utilitarian character of the installation. More specifically, one can assert here an affinity to Revolutionary Russian Agit-Prop vehicles of the 1920s⁶⁷⁷. Less related to the decorated floats than to the Agit-Prop trains and mobile Agit-Prop libraries, *Urban Cabaret* drew on similar means such as the appropriation of a standard vehicle (train carriage, horse-drawn carriage, van) with colour, slogans, media such as pamphlets, books or journals, graphic and image based exhibitions and any number of props that would allow for the creation of a temporary discussion forum or exhibition installation⁶⁷⁸. G.L.A.S. referred here in the use of the word Agit-Prop (a construction of the two terms Agitation and Propaganda) to the original meaning of the term 'propaganda' in Russian, namely 'the dissemination of ideas'. As a more recent reference this links also to mobile libraries that distribute knowledge and information into areas that are deprived of such communal services.

The reference to these predecessors was deliberate, although no direct or explicit

⁶⁷⁷ The use of decorated wagons acting as some form of display device is of course at least as old as the Roman triumphal processions. It is a form of display that has been appropriated over the entire course of history. Yet, in these cases of triumphal processions the decorated wagons or floats were not used in order to empower those that encounter these displays but they were usually used in order to convey the notion of power and ideology of a ruler or ruling class. They were also not necessarily used as mediation for any kind of architecture. If they used elements of architecture these were used in a metaphorical or symbolical sense.

See here also BONNEMAISON, Sarah and MACY, Christine (eds.) (2008). *Festival Architecture*. Routledge: London

⁶⁷⁸ See catalogue *Paris Moscow 1900 – 1930*. Exhibition 1979, Centre George Pompidou: Paris. p326,327,337

reference had been made by G.L.A.S. in the accompanying publications glaspaper 01 and 02. However, the proclamation that 'G.L.A.S. consciously draws [...] on the history of communes, avant-gardes and practical experiments in liberated labour and space [...]'⁶⁷⁹ suggest that the usage of avant-garde forms of mediation was integral part of G.L.A.S.' architectural praxis.

⁶⁷⁹ CHARLEY (2001). p2



Figure 76: Urban Cabaret - the Ape on its way to a local PIT STOP in Possilpark.



Figure 77: Float of the New Village publishing house showing a miniature cottage reading room at the May Day parade in Leningrad 1925



Figure 78: Urban Cabaret - PIT STOP at the Govanhill Pool Gala Day supporting the local community who occupied the pool for more than 200 days after its closure through the council.



Figure 79: Urban Cabaret - serving tea on Glasgow's George Square opposite the City Chambers.



Figure 80: Hands-on preparations for Urban Cabaret. Appropriation of record boxes that served as container, seats, or music boxes.



Figure 81: Urban Cabaret - Distributing glaspaper through a local Chip Shop in Parkhead



Figure 82: Architecture is already a political event - This exhibition in The Lighthouse acted as a documentation of Urban Cabaret. While the exhibition allowed to bring a certain political polemic into an architectural institution it lost, per definitum, its original participative approach.

CHAPTER 13 – Conclusion

You have to be careful with the concept of the 'laboratory'. I think it is a useful metaphor, but only a metaphor. We should not forget that a laboratory is a place where planned experiments take place. And sometimes of course you discover by accident. [...] If you are using the term of 'experiment', then one point you can make is that the laboratory reduces the complexity of reality in order to conduct experiments.

Jean-Louis Cohen in an interview with the author, 17.08.2005

It is about making new judgements, about the testing of new forms of analysis. Whether this happens in large or small exhibitions doesn't matter. What is important is that something new is created and the existing is scrutinised by putting it into a new context.

Kristin Feireiss in an interview with the author, 01.12.2005

The thesis has addressed the need and opportunity for a comprehensive investigation into the nature, history and contemporary meaning of architectural exhibitions, a need that arose from the established sketchy character of such a discourse.⁶⁸⁰ The overriding interest of this thesis laid thereby on exploring the architecture exhibition's potential to contribute to the progressive advancement of architecture as an intellectual and artistic discipline by means of experimentation within the actual exhibition setting. It is within this function of the exhibition that the thesis surmises the most potent answers to the question '*Why do architects make architecture exhibitions?*'. The thesis has therefore not been concerned with the role of the architectural exhibition as a promotional tool or the exhibition as a marketplace⁶⁸¹. The thesis was also only peripherally interested in the exhibition as a place for reflective presentation of a, mostly historical, architectural oeuvre. The thesis explored in PART I, Chapter 4 that the process of mediating and perceiving architecture, historical or not, also changes the exhibited architecture, ultimately produces (or re-produces) it. It thus depends on the set-up and intention of the exhibition and, not necessarily, on its material whether the exhibition is purely reflective or also projective and experimental.

The thesis worked hereby with the hypothesis that architects have developed, in parallel with the historical development of the discipline itself, a specific form or type of the architectural exhibition that specifically allowed for this kind of architectural

⁶⁸⁰ See Chapter 1, Introduction, Section 'Architecture Exhibitions – an underexplored field of research'

⁶⁸¹ The author has acknowledged the fact the every exhibition by a practicing architect has some element of a promotional quality as the exhibition inevitably provides public exposure, present the architect as a creative producer who could, potentially also do other kinds of work than that presented in the exhibition.

experimentation. The thesis has coined this exhibition type the Laboratory Exhibition. It was assumed that such an exhibition type has been developed and used by architects in order to experiment, develop and test emerging architectural ideas, production processes, and forms of praxis before or beside the production of permanent built structures and a more consolidated praxis.

In regard of the exploration and theoretical conceptualization of the Laboratory Exhibition the thesis had three main objectives. Firstly, the thesis wanted to produce a theoretical and historiographic basis through which the praxis of the Laboratory Exhibition can be examined and assessed. This was done through the exploration of the prerequisites of the Laboratory Exhibition as well as the examination of the historical developments towards this particular exhibition type. Secondly, the thesis wanted to dissect the historically developed means and elements that constitute the Laboratory Exhibition and produce evidence that the contemporary praxis the Laboratory Exhibition refers to and relies on its historical precedents. This was achieved by investigating five examples of a contemporary exhibition praxis and by putting these examples into the contexts of the thesis' theoretical and historical explorations. Finally, and in consequence of the first two objectives, the thesis wants suggest that this specific form of architectural exhibition is an indispensable part of the architectural praxis in which and through which architecture can be progressively transformed.

The superordinate research question of this thesis has been: *Why do architects make Laboratory Exhibitions?* This question has been of overriding interest for all three parts of the thesis. PART I has looked particularly at the theoretical implications of this question. PART II examined it predominantly under a historical focus. PART III finally approached the question under contemporary and practical considerations. Subordinate to this main research question the thesis further formulated three research sub-questions that addressed the specifics of the Laboratory Exhibitions. Each question has hereby been respectively dominating one of the three parts of the thesis. These sub-questions have been: a) *What are the key preconditions for the use of the exhibition as an architectural laboratory?;* b) *What are the historical momenta in the evolution of the Laboratory Exhibition that a contemporary exhibition praxis can refer to or draw on?;* and c) *How, and to what end, can an experimental framework be produced and deployed in today's praxis of the Laboratory Exhibition?* The following sections will each summarize the findings of the three parts of the thesis in relation to their respective sub-questions.

Findings from PART I

PART I and sub-question a) lead to an exploration of the acting subjects, the actual object and media of the exhibition, as well as the very action of exhibiting. All three aspects have been explored here in their historical development, generating and supporting a theoretical basis for the Laboratory Exhibition. The main findings of PART I in regard of the first sub-question can be summarized as follows:

- The subject we are dealing with in regard of the architectural exhibition and the Laboratory Exhibition in particular is not the single architect but rather a group of agents or producers that have a role within this process that is neither fixed nor self-contained⁶⁸².
- While the establishment of the architect as the author of architecture has been important in the development of architecture as a discipline and, maybe more importantly, the establishment of architecture as artistic and intellectual praxis, the thesis has established that a sole authorship is not tenable but that we rather have to speak of a multi-authorship of architecture⁶⁸³.
- This multi-authorship includes the recipient or user of architecture who finishes and thus produces the object, architecture, through the process of its consumption or use⁶⁸⁴.
- We have therefore established a historical process that, at its beginnings, defined the author or producer of architecture as the 'architect' and which has finally culminated in a situation where the distinction between producer and consumer are partly dissolved through collective and participatory production processes of architecture⁶⁸⁵.
- As for the object, the thesis has established that, contrary to most common perceptions, 'architecture' does not equate with 'building' (just as buildings do not equate for architecture)⁶⁸⁶.
- Architecture is only produced through the process of its mediation. This process is in

⁶⁸² The thesis has argued the case to regard the 'architect' not in its limiting legalistic definition as defined by architectural registration boards but to include all those actors, that are actively engaged in the intellectual and material production of architecture. See PART I, Chapter 2 'The Producers of Architecture – Defining the Subject'

⁶⁸³ This is a concept that has already been made explicit by the English Academician John Evelyn with his distinction of the *architectus ingenio*, *architectus sumptuarius*, *architectus manuarius* and the *architectus verborum*. See PART I, Chapter 2, Section 'The personification of architecture'

⁶⁸⁴ See PART I, Chapter 4, Section 'The perception of architecture through its media'

⁶⁸⁵ See PART I, Chapter 2, Section 'The emergence of the audience'

⁶⁸⁶ See PART I, Chapter 3, Section 'Architecture is not a building'

essence a critical process that needs a subject who presents and a subject that perceives the object.

- The thesis has called these two groups the primary and secondary producers of architecture. However, it is possible that these subjects are one and the same person and the primary producer is ultimately also the consumer, hence secondary producer, of his/her own product.

- Architecture is developed through media. These media have been developed in parallel and in interdependence with the development of architecture, consequently creating a dialectical relation between means and ends⁶⁸⁷.

- Architectural media can be divided into media of presentation and media of representation. While the former are media with a projective quality used in the primary process of producing architecture, the latter are media with a reflective quality usually used after the primary production process. However, the thesis has established that both types of media can be used with the Laboratory Exhibition⁶⁸⁸.

- The architectural exhibition can have several functions. These functions are projection and experimentation, reflection and critique or promotion and education. Often an exhibition will constitute a combination of two or even three of these functions⁶⁸⁹.

- It has been established that the private or public exhibition of architecture has been an important aspect within the development of architecture and that the architectural exhibition is one crucial medium in the development and production of architecture⁶⁹⁰.

- The gradual process of establishing the architectural exhibition within a public, purpose built and institutionalized exhibition space led on the one hand to a consolidation of architecture as a discipline and canonized part of culture. On the other hand, however, it also led to a stifling of an experimental exhibition praxis that could support or evoke a progressive development of architecture.

- The laboratory exhibition is therefore partly characterized through a 'breaking-away' or digression from such an established and institutionalized mode of exhibiting architecture. This digression has similarities with forms of exhibiting architecture that

⁶⁸⁷ One can assert here that the development of certain media and with it certain techniques of presentation have influenced the actual design process. For instance, without invention of the perspective, Baroque architects would not have transformed or planned cities on the basis of perspectival views along an axis. See PART I, Chapter 3, Section 'Architecture as medium, the medium as architecture'.

⁶⁸⁸ See PART I, Chapter 3, Section 'Architectural media'

⁶⁸⁹ See PART I, Chapter 4. 'Exhibiting Architecture'

⁶⁹⁰ See PART I, Chapter 4, Section 'The perception of architecture through exhibitions'

pre-date the formation of the 'exhibitionary complex' through which these institutionalized modes have been established.

Findings from PART II

PART II and sub-question b) then considered the historically emerging forms and locale of the Laboratory Exhibition. This part also exemplified how the theoretical and practical preconditions of exhibiting architecture in general as explored in PART I have been relevant in the specific historical developments towards the Laboratory Exhibition. The main findings of PART II in regard of the second sub-question can be summarized as follows:

- Producers of architecture, primary or secondary, have created and appropriated a variation of situations, spaces and formal arrangements in order to experiment with architecture through and in its exhibition.
- The three principle categories under which one can classify the various forms and locale that can provide for the Laboratory Exhibition have been called 'Places of Production', 'Curated Laboratories' and 'Laboratories in Real Scale'.
- These three overarching categories are not linked or exclusive to one particular historical moment or period but are transhistorical phenomena. However, the specific locales and forms that are summarised under the three categories indeed originate within a particular historical period. Yet it is their intrinsic principles regarding the experimentation with and through architecture that make them relevant for a contemporary Laboratory Exhibition praxis.
- Architects have used, and are using, various places of architectural production. As part of this production they also experiment with 'hitherto unimagined, un-tested, un-established architectural propositions', thus conducting an experimental praxis. In many cases these places of production are also acting as places of display and mediation, thus providing the locale for the Laboratory Exhibition.
- The thesis has shown that these places of production, which are relevant for the Laboratory Exhibition, do not necessarily have to be places that are normally associated with producing architecture. Examples were here the *museion* and the *studiolo*⁶⁹¹.
- One can further distinguish two different forms of the 'Place of Production' acting as a Laboratory Exhibition. On the one hand there are those places that are already places

⁶⁹¹ See PART II, Chapter 5, Section 'The *museion* – creation and exchange of knowledge', ppXX and Section 'The *studiolo* – hidden displays and the superposition of storage and production', ppXX respectively

of architectural production and are then, temporarily or permanently, appropriated as places to exhibit this production process. On the other hand are existing exhibition spaces that are, again temporarily, transformed through the installation of a architectural production process into the exhibition space⁶⁹².

- Besides the places of architectural production the thesis has identified locales in which the experimental notion of the exhibition is produced not through the primary production of architectural media and architectural propositions but through the curation of such material⁶⁹³.

- In the 'Curated Laboratory', the creative impulse is transferred to the exhibition curator and this curator may or may not be also an architect. Through the new contextualization of the exhibited objects according to the curator's agenda the curator alters or even recreates the architectural objects. It is through this process that curating can become, as a place of architectural production, also an experimental praxis.

- This experimental notion is further supported and intensified by the spatial arrangement or presentation of the material. One can coin this process the creation of a micro-cosmos. The creation and presentation of a micro-cosmos can hereby be achieved through the transformation of existing spaces or in new and purpose built spaces⁶⁹⁴.

- It is here in particular the multilayered form of display – from the architectural container or building, to the interior decoration, the display furniture and finally the exhibited objects – that present new spatial and formal configurations and experiments with new forms of social engagement with these configurations⁶⁹⁵.

- The thesis has shown that a gradual process of consolidating and institutionalising the Curated Laboratory from the 19th century onwards undermined its quality as a place of active deliberation, experimentation and production⁶⁹⁶.

- The results of this stifling process have been again challenged since the early 20th

⁶⁹² An example for the former would be the Architect's studio that opens to a public. And example of the latter would be for instance *Traumhaus 2000* that temporarily installed a place of production in the *Akademie Galerie*.

⁶⁹³ See PART II, Chapter 6, 'Curating the Architectural Laboratory'

⁶⁹⁴ The locale where this becomes most prominent is the 16th century *Kunst- or Wunderkammer*. See PART II, Chapter 6, Section 'The Wunder- or Kunstkammer – creating a micro-cosmos'

⁶⁹⁵ The first locale to develop this notion of a 'total exhibition' is the 18th century *cabinet des curiosités*. See here PART II, Chapter 6, Section 'The *cabinet des curiosités* – creating a public locale to create a world in miniature'

⁶⁹⁶ This affected in particular the architectural museum. See here PART II, Chapter 6, Section 'The first architecture museums'

century when avant-garde artists and architects developed concept which would allow to transform the museum again into a 'Kraftwerk' and experimental field⁶⁹⁷.

- The thesis has finally examined parameters and potential of 'Laboratories in Real-Scale', - exhibitions that give architects the opportunity to experiment with architecture on a spatial, technological, social or cultural level in a scale identical or close to that of 'real buildings' or a more permanent building process⁶⁹⁸.
- The temporal nature of the structures erected as 'Laboratories in Real-Scale' allow for a simplification of the complexities of the normal building processes and can thus concentrate on one or several specific aspects that are to be tested through the exhibition.
- 'Laboratories in Real-Scale' thus allow for more valiant and pronounced questions and propositions. Consequently, they are able to reinforce radicalism in architecture, an argument that has also been supported by Jean-Louis Cohen.
- The thesis has also shown that early 'Laboratories in Real-Scale', such as the mid- to late-19th century world expositions, have also been the testing ground for new display techniques and the involvement of the audience that both made the exhibition veritable 'viewing machines'⁶⁹⁹. As such they were also acting as an experimental generator for exhibition set-ups used in other, subsequent forms of Laboratory Exhibitions⁷⁰⁰.
- It has been shown that the 'Laboratory in Real-Scale' allows for the experimentation of new production forms of architecture, including for instance collaborative or participatory processes as in the case of building exhibitions⁷⁰¹.
- A crucial aspect of this type of laboratory is finally the inclusion of the audience into the exhibition set-up. This relates firstly to the possibility of a total experience of architecture through the exhibition. But it also, and more importantly for the

⁶⁹⁷ The term *Kraftwerk* or power station has been coined by Alexander Dorner. Contemporary examples of this reinterpretation of the museum include exhibitions such as 'Iconoclash' and 'Making Things Public' by Bruno Latour at the ZKM, 'Laboratorium' by Obrist and Vanderlinden but also new approaches to museum such as 'Museum in Progress' (www.mip.at).

⁶⁹⁸ See PART II – Chapter 7 'The Laboratory in Real-Scale'

⁶⁹⁹ Kenneth Frampton uses a similar term, the 'exhibiting machine' in relation to Victor Contamin's *Galerie des Machines* at the 1889 exhibition in Paris. See FRAMPTON (1992). p35. Tony Bennett uses the term 'Machines of Progress' to describe museums and expositions of the 19th century. See BENNETT (1995). p10.

⁷⁰⁰ One could refer here to the exhibition techniques of Charles and Ray Eames who used the term 'information machine' to describe their multi-media exhibition design for the 1959 *American National Exhibition* in Moscow. And according Beatriz Colomina, the Eamses 'treated architecture as a multichannel information machine' just as they saw 'multimedia installations as a kind of architecture'. See COLOMINA, Beatriz (2001). 'Enclosed by Images: The Eamses Multimedia Architecture' in: *Greyroom*, No. 2 (Winter, 2001). p22

⁷⁰¹ See PART II, Chapter 7, Section 'Building Exhibitions – exhibiting new forms of housing'; also PART III, Chapter 8 'IBA 1987 – Transforming the City through an Exhibition'

experimental character of the exhibition, allows for a participation of the audience in the actual production of or experimentation with the Laboratory Exhibition⁷⁰².

Findings from PART III

PART III and sub-question c) finally investigated how a specific, yet exemplary, contemporary praxis is related to both the theoretical basis formulated in PART I as well as to the three historical forms and locale of the Laboratory Exhibition as established in PART II. The main findings of PART III in regard of this sub-question can be summarized as follows:

- As for the acting subjects the thesis has demonstrated that the main incentive for the Laboratory Exhibition comes from the primary producers of architecture, - architects. The architect can however also take the role as curator who then acts as the primary producer of the exhibition⁷⁰³.
- In most Laboratory Exhibitions the audience plays a crucial role in the experimental set-up of the exhibition or indeed in the experimental production of the exhibition itself. Exhibitions engage here with an audience that goes beyond a purely professional audience but tries to engage with as wide and divers a public as possible⁷⁰⁴.
- There is a crucial distinction between interaction and participation of an audience in and with the exhibition. Only the latter gives the audience a truly productive role while the former usually only invites the audience to take part in a predefined structural set-up with clearly defined limits of engagement. The audience might, in this latter instance, be indeed used as one component of the exhibition experiment. Audiences can therefore be acting and be acted upon in the Laboratory Exhibition.
- The active inclusion of the audience is thus not a prerequisite of the Laboratory Exhibition and there are indeed exhibitions where the audience is not needed at all for the experiment⁷⁰⁵. These exhibitions leave the autonomy of the author or producer, whether this is the curator or the exhibiting architect, unquestioned.

⁷⁰² See in particular PART II, Chapter 7, Section 'Architectural Installations – experiments in and with the public realm'; also PART III, Chapter 10 'Traumhaus 2000 – Participatory Production of an Exhibition'

⁷⁰³ See PART III, Chapter 8 'IBA 1987' and Chapter 11 'Less Aesthetics, More Ethics'. In both cases a practicing architect, Hardt-Walther Hämer and Massimiliano Fuksas, takes the role of the curator.

⁷⁰⁴ Examples for exhibitions where the audience plays a crucial role would be *IBA 1987*, *Traumhaus 2000*, and *Urban Cabaret*.

⁷⁰⁵ *Architectural* and *Less Aesthetics, More Ethics* were not dependent on their audience in regard to their experimental set-up or production.

- As in all exhibitions, the audience of the Laboratory Exhibition has however a role in the completion of the exhibition and the exhibited object. This is done by producing meaning through perception and reflection. It is a process that ultimately changes the object and makes the recipient a secondary producer⁷⁰⁶.

- The five case studies have shown that there is no coherent formal expression of the Laboratory Exhibition in terms of size, space, institution, media, temporality, or locality.

- The case studies have also shown that Laboratory Exhibitions do not have a common understanding of architecture. In relation to the way in which the exhibition conducts its experiment or presents its object, architecture is regarded as material reality, intellectual construct and/or societal process; most case studies have shown that it is a combination of two or all of these aspects.

- Consequently, the actual object of the exhibition and the nature of the experimentation with this object vary and can range from purely spatial or material experiments to the test of new architectural programmes or theoretical and ideological hypotheses. However, all examined case studies had, in one form or another, an experimental element that dealt with new processes in the production of architecture⁷⁰⁷.

- The thesis has also shown that Laboratory Exhibitions aim to expand the architectural field, both in relation to the actual artistic and cultural discipline as well as in relation to its executed praxis. This ultimately shifts and/or extends also the scope of the profession and the role that it plays within the production of the built environment.

- The majority of examined case studies aim to challenge the prevailing politics of architecture. Through research, interrogation and critique of the traditional or normative parameters that are used by producers of architecture they suggest alternative forms of perception and production of architecture. These Laboratory Exhibitions are in essence political experiments⁷⁰⁸.

- Most Laboratory Exhibitions are preceded by a crucial preparatory process in which a

⁷⁰⁶ See also PART I, Chapter 2, Section 'The emergence of the audience' and PART I, Chapter 4, Section 'The perception of architecture through its media'

⁷⁰⁷ *IBA 1987* tested new forms of engaging with democratic planning and building process in order to achieve its goals of a careful urban regeneration; *Architectural* experimented with a cross-disciplinary collaboration between an architect and a photographer; *Traumhaus 2000* experimented with participatory processes in the production of the exhibition itself; *Urban Cabaret* tested forms of public engagement with architecture.

⁷⁰⁸ This applies for the exhibitions *IBA 1987*, *Traumhaus 2000*, and *Urban Cabaret* as well as *Less Aesthetics, More Ethics*. The first three exhibitions are dealing predominantly with new forms of architectural and urban production while the last is predominately concerned with how we perceive and approach architecture and urban issues.

hypothesis for the actual exhibition is formulated⁷⁰⁹. This process can be described, to use an expression by Bruno Latour, as a 'thought experiment' that precedes the actually 'built' or physical laboratory in the exhibition space⁷¹⁰.

- Architects use the Laboratory Exhibition to develop, test and establish new forms of production for their own praxis⁷¹¹. They further use the exhibition to identify new fields of activity. The exhibition has thus a catalyst function for the further development of architects.

- Laboratory Exhibitions are often characterised through experimental, extra-disciplinary approaches, including methodologies, techniques and/or formal expressions from neighbouring art disciplines as well as from social, political or natural sciences.

- One can distinguish hereby between those exhibitions that purely appropriate these methodologies, techniques and formal expressions into the exhibition and those exhibitions that present a veritable transdisciplinary exchange and include producers from these other disciplines within the production of the exhibition and its experimentation.

- Through their transdisciplinary approaches, Laboratory Exhibitions contribute to a gradual transformation of architecture as a discipline as well as the architectural profession.

- Inherently, the Laboratory Exhibition poses the questions 'What is architecture?'. It does this through experimentation with new spatial and social propositions of architecture, new forms of production and new modes of the perception of architecture. The Laboratory Exhibition is thus an indispensable part of the architectural praxis in which and through which architecture can be progressively transformed.

- The analysis of the case studies has demonstrated that Laboratory Exhibitions do not necessarily fit only in one laboratory typology as explored in PART II. In fact they are mostly a combination of two or even three of the described typologies, with often one

⁷⁰⁹ In the case of *Less Aesthetics, More Ethics* this preparatory stage includes for instance the two online forums in which the topic of the Biennale was first developed. In the case of the *IBA 1987* one has to mention the numerous consultation processes. In the case of *Architectural* the preparation for the 'built laboratory' – the hanging of the photographs by von Gagen – happens already during the moment when the photograph is taken, but also in the process of selecting the photographs for the exhibition.

⁷¹⁰ See LATOUR (2004). pp127–129

Also: <http://www.bruno-latour.fr/poparticles/poparticle/P%20109-WEIBEL.html> [Last accessed: 16.06.2008]

⁷¹¹ See PART III, Chapter 8 '*IBA 1987*' and Chapter 12 '*Urban Cabaret*' in particular. G.L.A.S. experimented in *Urban Cabaret* with new forms of engagement, tested various forms of mediation with the aim to establish an alternative form of architectural praxis

type dominating over the other(s)⁷¹².

- It has further been shown that all case studies have subsumed elements of historic predecessors and used either presentation techniques, forms of audience engagement, predefined locales, or indeed a specific exhibition typology from the exhibition typologies as described in PART II in order to produce the experimental set-up of the exhibition. In that respect, the historical precedents or forerunners are of fundamental relevance to the contemporary Laboratory Exhibition praxis⁷¹³.

Outlook on the further development of the Laboratory Exhibition

The research findings presented in the sections above have underlined that the Laboratory Exhibition is indeed a transhistorical praxis that relates to its historical precursors and has relevance for a contemporary exhibition praxis. This section wants to speculate on some developments that this particular exhibition praxis may take in the future and deduct thereof some recommendations for those engaged in an experimental exhibition praxis in particular or indeed the production of architecture in general.

The five presented examples of a contemporary Laboratory praxis have already shown, either in parts of the exhibition or in the entire exhibition, the tendency to concentrate their experimentation on the processes of producing architecture. This signified a shift from the earliest experimentations with architecture through or in exhibitions that first favoured the presentation and testing of form or style and later included the experimentation with space and programme. Examples for the former were for instance the masques and festival or theatre installations of Renaissance and Baroque architects that tested, as Smithson has called it 'the real before the real' use for 'as opportunities for the realisation of the new style'⁷¹⁴. Examples for the latter are

⁷¹² As a building exhibition, the *IBA* is per se a Laboratory in Real-Scale. However the specific process orientation of the *IBA* qualifies it as much as a Place of Production. It can further be regarded as Curated Laboratory as Hämer curated the experimental structure of the exhibition through the selection of architects and design briefs; *Architectural* qualifies as a Place of Production and as a Curated Laboratory; *Traumhaus 2000* is as installation in space first a Laboratory in Real-Scale, yet the participatory process character of the exhibition qualifies it as well as a Place of Architectural Production; *Less Aesthetics* is predominantly a Curated Laboratory with parts of the exhibition that are as well a Laboratory in Real-Scale; *Urban Cabaret* combines the Laboratory in Real Scale with the Place of Architectural Production.

⁷¹³ In some cases this process appears to have been subconscious or without overt reference to these predecessors. However, the thesis maintains that this could rather be ascribed to an ignorance of the transhistorical tradition in which the individual exhibitions are placed and does not diminish the relevance of these predecessors for such a praxis.

⁷¹⁴ SMITHSON (1982). p62

the exhibitions of the 1920s avant-garde architects that combined, in the exhibitions of new social housing projects for instance, the display of new spatial arrangement with new social programmes.

While the experimentation with new formal and spatial approaches to architecture can still be found in contemporary exhibitions, one could just refer here for example to the annual 'event' of a new Serpentine pavilion, the thesis would argue that these experiments are indeed less relevant for the progressive transformation of architecture⁷¹⁵. This progressive transformation is rather to be found in the experimentation with the actual production, mediation and perception of architecture in combination with progressive social, political and economic concepts and programmes of usage. It is here where architecture as a artistic, cultural and social discipline, as an intellectual discourse as well as a profession has the most potential of experimenting with its future.

The shift towards processes and questions how and by whom architecture is produced consequently leads to a constant transformation or extension of the concept or understanding of the term architecture. In order to accommodate or react to this changing nature of architecture the Laboratory Exhibition itself changes. Not only does the Laboratory Exhibition has to find new locales, include new actors, and develop new forms of experimentation, but ultimately it questions also the very distinction between exhibitions and other forms of architectural manifestations.

What we are confronted with here, is the 'blurring' or merging of various aspects, facets or expressions of the architectural praxis. The thesis had already established that the architectural Laboratory Exhibition, as a medium of architecture, has to be regarded as architecture⁷¹⁶. Similarly, we have more and more experimental built structures or spatial interventions, with projects that have demonstrative, communicative and/or mediating elements, acting simultaneously as Laboratory Exhibitions. Architectural practices that engage with such a transitional praxis would include Raumlabor in Berlin, Park Fiction in Hamburg, Public Works in London, or atelier d'architecture autogérée

⁷¹⁵ The selection architects for the Serpentine pavilions has followed relatively conservative paths, choosing each year the allegedly most talked-about architect and thus acknowledging as well as enforcing a, still prevailing but nevertheless outmoded, star system. In recent years this included Zaha Hadid, Daniel Libeskind, Toyo Ito, Alvaro Siza, Rem Koolhaas, Olafur Eliasson and forthcoming Frank Gehry. Where some these pavilions become indeed interesting for a critical and progressive debate on architecture is then only in their additional programme. But the design and construction of these pavilions does hardly include progressive production or mediation processes.

⁷¹⁶ See PART I, Chapter 2, Section 'Architecture as medium, the medium as architecture'

(aaa) in Paris. These are practices that deliberately blur the distinction between an exhibition praxis and a 'normal' architectural praxis⁷¹⁷. Their projects are exhibitions and their exhibitions are projects.

The new production processes that such a progressive Laboratory praxis would have to engage with include: collective and collaborative productions processes that question normative and hierarchical structures; processes of user participation and interaction that ultimately transform the role of the producer or include further actors into the production of architecture; transdisciplinary productions that go beyond the obvious neighbouring disciplines but may include social and economic sciences to name just two examples.

This praxis would further have to engage with a broadened range of social, spatial and economic situations in which architecture can contribute to positively transform our society and the built environment we are living and working in. These situations will predominantly be outside the canonized realm of our cultural institutions, including our architectural museums and galleries. Architectural experimentation and the Laboratory Exhibition have to leave their zones of comfort in order to maintain their social and political relevance. In order to engage with the 'unknown' architecture and architects will have to learn new languages, forms of expression and modes of communication.

The thesis has shown that the Laboratory Exhibition, as an experimental architectural praxis, has historically been flexible enough to adapt to different spatial, social and ideological situations. It allowed for a broad range in size, form, public and nature of its locale. It can be produced by a range of different actors who can take varying roles in the architectural experimentation of the exhibition. All these aspects of its inherent transformable qualities strongly indicate that the Laboratory Exhibition is also prepared to accommodate the transformations as outlined above. It will be through these continuous transformations that the Laboratory Exhibition will maintain its role in the progressive and experimental development of architecture.

⁷¹⁷ For a comprehensive overview of practices and groups engaged with this transitional praxis of a public production, experimentation and exhibition of architecture see: PEPRAV and atelier d'architecture autogérée (eds.) (2007) *Urban Act*. aaa: Paris. Also: HAYDEN/TEMEL (2006).

Original contribution of this thesis

In conclusion one can assert that the original contribution of this thesis has been threefold. Firstly, the thesis identifies and defines the key characteristics of an experimental architectural exhibition praxis. The thesis has coined this praxis the Laboratory Exhibition. It has been established that the term and concept of the 'laboratory' in conjunction with art and architecture has been in use since the Russian Constructivists. A more recent exhibition praxis and critique thereof has also used the term 'laboratory' to describe more or less experimental exhibitions. This thesis is however, the first scholarly critique that systematically explores the notion of the architectural Laboratory Exhibition and defines this praxis through a theoretical and historiographical analysis as well as a foundation in an exemplary praxis.

Secondly, the thesis has established that an experimental praxis of architectural exhibitions is of a transhistorical nature and significance that predates the 19th century and Modernism. This is in contrast to most architectural histories that see the beginnings of progressive, and experimental, architectural exhibitions in the mid- to late 19th century world expositions or focus on exhibitions of early 20th century avant garde architects and artists. While both these moments are crucial in the development of the Laboratory Exhibition, the thesis has made the point that one has to go as far back as the 15th century to fully understand the development of a public experimentation with architecture through exhibitions.

Finally, the thesis has argued that the Laboratory Exhibition is an indispensable part of the contemporary architectural praxis in which and through which architecture can be progressively transformed. To date there exists no critical work that deals with this aspect of the architectural production. In that respect, the thesis' significance lies in the contribution to an important but largely absent discourse on an exhibitions praxis that can inform the development of architecture. The thesis' contribution is a crucial step towards such a discourse that has by no means been exhausted through this thesis but which is in need for a further exploration.

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1.1. Introduction

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APPENDIX A – INTERVIEWS

APPENDIX A presents the transcripts of a series of in-depth interviews with producers of architectural exhibitions – architects, architect-curators, curators – that have been conducted in order to gather first hand material on exhibiting architecture and the relation of exhibition to the architectural praxis. These interviews have informed the research direction of the thesis and enabled the fine-tuning of the research question. They were useful in testing or discussing certain thoughts or theoretical arguments presented by the author about the Laboratory Exhibition with other producers involved in this form of praxis.

The interviewees are:

Will Alsop
Jean-Louis Cohen
Kristin Feireiss
Massimiliano Fuksas
Stuart MacDonald
Joep van Lieshout
Otto Steidle

The criteria for the selection of the interviewees partly originate from the thesis' ambition to connect the author's own experience and praxis with a wider theoretical and practical framework. In that respect all interviewees have either been part, in some form or another, of the author's past exhibition praxis or they have been influential through their work for this praxis. However, beyond this personal or subject selection criteria the interviewees also present an exemplary range of practitioners involved in the production of architecture exhibitions in general or the Laboratory Exhibition in specific. They are all distinguished architects and or curator/critics, with different cultural or national backgrounds, with varying forms of practices or related to influential institutions of different sizes and nature.

The interview with the artist Joep van Lieshout was conducted as his work is situated between the art and the architectural object. The author anticipated that Lieshout's crossover approach would make him particularly susceptible for the notion of the Laboratory Exhibition. The interview led to a different finding but it is nevertheless included in this appendix.

The interview with Otto Steidle was conducted prior to the start of this research. It was originally conducted and recorded for the 7th Architecture Biennale in 2000 where it was shown in conjunction with Steidle's installation 'The Nomad's Tower'. Steidle's unexpected and tragic death in 2004 prevented me from conducting a separate interview for this thesis. Although this 2000 interview does not specifically relate to exhibitions it nevertheless presented an important primary source for 'Architectural' the case study presented in Chapter 9 and is therefore included in this appendix.

Interview with Will Alsop

Conducted in Will Alsop's studio, 15. August 2005, Full Transcript

FK: The PhD, or the whole research is about a) about the historical development of architectural exhibitions, why architectural exhibitions emerged as one part of the architectural praxis, and then trying to establish what I see as three different categories: one I call the archive, one is the marketplace, and the last the laboratory. And I try to focus in the second and third part of the PhD on this laboratory. The laboratory being one form of exhibition where a new architecture is tested in a way, where the architectural exhibition is used as an extension of the architectural praxis itself. And I am trying to trace where that first begins. Maybe in the early exhibition pavilions in the world expositions but also when people like Melnikov did the first constructivist pavilions that was giving in an exhibition environment the chance to ...

WA: Kiessler as well

FK: Kiessler as well at the same exhibition in 25 in Paris, there interiorly. So then trace out through the 60s where also new influences also coming from the arts, happenings, installations, performance kind of things in Vienna, but also here in London. And then seeing how this approach is still valid today and what kind from it takes.

WA: I mean your differentiation between the types of exhibitions is okay. ... You put on an exhibition. You have a book, you have a catalogue and you have the exhibition. The exhibition clearly should always do something that the book and the catalogue can't. That's my main gripe about some of those exhibitions. If (?) you look at all the drawings at the wall, you could be actually more comfortable at home a glass of wine and with a book. And you get the same thing. There is nothing interestingly new. Certainly, - I am a Royal Academician – and we did put on an exhibition at the .. and we did commission a complete, very comprehensive walk through the bank of England, as it was when he did it

FK: Virtually or real

WA: Virtually. That was very interesting because you could understand something that he had done in spatial terms that you could not get from a book or a catalogue. You had to experience it. Yes, you could have it on CD if you wanted to. It wasn't offered – we missed an opportunity there, but anyway. Or the retrospective ... the sales or ... kind of exhibition I am not really interested. That's another category completely. But on your third category it is interesting because here in 2005 there are not many of them. And you're right in the broadest sense of that in the 60s, and I think you're right, Vienna was the one place where this did happen, probably more than here I think. But suddenly that disappeared. But you could trace almost the history of this with the history of a magazine like AD. Over the point in time when AD became less interesting. And AD used to deal with ideas, speculation on the future and new theories. It didn't matter whether they were great, or well founded, but they were there to make you think. And can make you see, most importantly, your own work and your own endeavours perhaps in a slightly different context and I think that this is a very important function of exhibition. Who ever you are, whether you are another architect or an accountant even better. So you ask yourself why did this shift take place. Why less speculation, and more reality. And I think that certainly here in this country the 70s was a strange decade. I don't like that much to talk about decade, because it is never, but it is convenient. But at the end of the seventies, and we went through a very difficult patch during the middle of the seventies with the miner strikes, with industrial ... and that of course that was taken on by Margaret Thatcher in 1979, which was when she

first came to power, and she was in power for a very long time. And as indeed here party was even longer than her. But it also coincided with the rise of the yuppie. The yuppie is actually a very materialistic being who likes money, likes real things and is a bit short on speculation. And of course we were suddenly subjected to a whole range of architecture, a new generation of architects and architectural students, who were primarily interested in building things. And this was a significant shift I think. Many architects of the say sixties, and we can go back before that, but I think the 60s was an interesting period. And anyway, I remember it much better and not so much that the 50s. And this was a period where people were generally more interested in ideas – not everyone. And somehow this was devalued. But actually an idea is not intrinsically ... I think you can almost trace it to what was imported from America, and still is over a long period of time, this is this idea of risk. Risk is to be avoided. It has something to do with accountancy and business.

FK: You think that this is an American thing?

WA: Oh yes definitely. That started there, and we imported it. Many things that happen in America, start in America, they come here and a little bit later they find their way into mainland Europe. You can see it very clearly, even in education. Say at the TU in Wien. It is not the original idea of education, which has been in place in Austria for a long time. Now they have a budget, you stick to the budget. This notion of paying your (tuition fees), of making a contribution towards your education costs. All started in America, via here, over there. It's a bad drift this west to east direction – maybe. There are also some benefits as well. It is not all negative. But as far as your subject is concerned, the emphasize became more on ... (phone call)

And don't forget in the sixties you (interference) All of those kinds, who were trying things out. You had drop-city, I mean you know all this stuff, and plus fed by the, out of the Hippy movement came the green movement to. Very much so.

FK: That is interesting because I was just talking to Wolf Prix the other day and he defined the end to that period of experimentation around 72/73. Due to a) the energy crisis and also the ecological problems that first arose. And then suddenly people were saying, well enough playing around, there are serious issues we have to be serious here. You can't fool around anymore. And also, he was talking about the killing off of the youth culture at that time. I don't know if ...

WA: I can here him say that.

FK: ... that is a particular Austrian phenomenon.

WA: Well I think in terms of (the position of?) architecture and architectural thinking in Austria, there are other things at play there. So your thesis is not about Austria in particular.

FK: No

WA: And I think that the problem with Austrian architecture is still that it is controlled by too few architects. But that's a very particular problem and peculiar to Austria. Peculiar to Austria and New York City, but anyway that's another, or East coast. There were some real issues centred around what we were saying, but my memory of the whole Hippy movement, was living cleanly, simpler, conserving energy. There was the emergence of the interest in wind power – not that this didn't exist before – but suddenly it got highlighted. Wind generation, renewable energy. And because what people were interested from an architectural perspective was – could these new or renewable forms energy and energy conservation and all the other green choices of material could this change the architecture. It wasn't so much that I believed that you

also have to utterly devoted like a missionary in order to do it. Although there was a missionary element to it. But it was exciting because helped ... Remember we are talking about the context where modernism in its various forms had reigned for a very long period of time, generally speaking, amongst architects. Not so much amongst the people. And it was time to change. And that's way we saw two strands coming up, one was the green movement and then there was the post-modern movement. They are both exactly the same form one point of view. They are trying to break out of something look at the world in another way. An of course, post-modernism, before it became a style, was much more interesting, than what it sadly became. You know, the idea was that the perception of the world, the work was how you perceived it, whether you were an architect or not. And therefore there were many things you could add to it. More than the, let's say, very noble intentions of pure modernism were, which actually all very pragmatic elements, more light, clean lines and industrial production in some cases. ... Sadly this whole movement got corrupted anyway by, very often the developers.

FK: But that was in a way the time when you came onto the scene. How did you position yourself within that period? In a time where the experimentations of the 60s were already over, but we had new things coming in, like you just said, like post-modernism.

WA: Well, there were new materials as well. New forms of structures. Pneumatics was new and a wonderful structure to play with. And tensegrity structures, folded plates structures, the time of Buckminster Fuller and all that. But when I first started at the AA, architectural education was primarily characterized by the idea of problem solving. Looking back, I don't think it wasn't very helpful, but it was quite refreshing as 19, 20 year old that I was. Therefore in the first two or three years of my studies I didn't design any buildings at all. I was looking at various programmes, which were set to thinking around (?), thinking in another way. You have to remember that it was also very much influenced by Cedric Price, even though he was not present as a teacher there at that time. We all knew about him, but no one saw him. Famously the idea when someone asks you to design a house and you say, well perhaps you should get a new wife. Look at ... I was heavily influenced, funny enough, to bring it back to Austria, by Carl Popper. And therefore we encouraged to read Carl Popper and to understand that and to look at the problem solving culture within that lines of thought. At the same time the introduction of semiotics, which is also the beginnings of post-modernism in some ways. You had, I already mentioned new materials and new structures, the technical side of things, which is also, all up in the air, everything was for grasps. So the truth is, I haven't designed a building at all. Quite a shock.

FK: Does that mean that exhibition also didn't play a role.

WA: Well they did. And, but for me, the exhibition was the Architectural Design magazine. In a way, that's what I looked forward to coming out on a Friday at breakfast time, every month. And it did come out every month at that time. It was interesting because you knew you'd always going to be challenged. There was always something new that you hadn't thought about. There was the Whole Earth catalogue, that was another one, a sort of bible, more for the hippy side than the other side. There were a lot of publications. There was the International Times, which was basically a drug inspired, music inspired new culture. There was ... magazine challenging all the edges what society stood for. So to me, that was all architecture, whatever it was it was world of testing which made it interesting. But clearly, that can't go on forever. To a degree of course, but in some ways then you have to consolidate. So in terms of the energy movement some of that rubbed off and was taken on by companies. Some initially small amounts of money, then larger amounts of money, first recognising the problem and then investing in that problem so as we sit here today, we are building big wind farms of the coast of Norfolk. So the Kyoto Agreement and everything else. That wouldn't

exist if those sort of peripheral movements had not been taken root amongst the youth culture of that particular period we are talking about. The same time there was something else going on, which I would characterize, and I think it was a very important point in European architectural history – and this is from an Englishmen's perspective – which was the competition for the Centre Pompidou in 1971. The first time you had people sitting in London – architects – instead of looking to America looking to Europe. Mainland Europe didn't mean anything when I started at the AA. History, historically yes, but in terms of what was going on at that time – not interesting. Everything interesting that was happening was either in America or in Japan. And then suddenly another emphasize. Pompidou, he said something very important: 'Architecture in France died with Le Corbusier. We have no architecture. Architecture is a part of culture. France is very devoted to the idea of culture. Therefore we have to rebuild it'. And that's why he made, what was an extraordinary move and a very important institutions, with a lot of money, and a very expensive building, in the hart of Paris, to make it into an international competition. I think that was a highly significant move. Never happened in Britain before. And, of course as we know, it was won by an Italian and a Brit. And then that was built and created a lot of excitement. ... It was the first time that that particular camp of the High Tech actually take on something that was of a significant scale, in a significant place for a significant function. People were very excited about that. So you could that, if you wanted to, that the Centre Pompidou actually turned things around form notion of speculation and testing and trials and ideas to reality. Maybe that was in part, not totally, the beginning of that switch. But I would still maintain that the notion of not taking the risk and the emergence of this other group, the post-hippy generation, who became yuppies – this is a terrible generalization of course – who were more interested in material things at wide. And in architecture as a business and a power play and everything else. And it was fired by politics as much as anything. Politicians and accountants – there was a new way of looking at business, which goes still on today, which is still evolving. Whereas up to that point, and again that is a terrible generalization, the way that one conducted business was far less scientific. Well I don't know if it is always the right way how we do it today. We could argue that we would still have a car industry here if it hadn't been for the accountants. Or there was no real investment in ideas or technology around the car industry. Completely opposite to Germany by the way, you invested a lot. So, as a consequence of that, we don't have a car industry. We assemble cars under different badges but that's it. It comes to a stage where it becomes a fact and if that is the case you ...it has basically to do with .. offloading those areas of risk in the business and never associating what designer in the broadest sense of the word could offer to your business. And I think that to a large extent we suffer from until today. So on one level we have a government that says 'oh yes, we believe in design, the creative industries, that's important as part of the post-industrial society' – but they don't back it. Not really. So they know what they ought to be doing but they don't practice it. There is still the culture of business and making money is somehow seen to be divorced from the value that design and architects can create. The notion of social value hasn't even occured to them. That's another issue. But these are challenges for the future.

FK: What are the steps to take to approach these challenges from the architects' point of view?

WA: I don't know. Shouting (laughs). I should prefix this in saying that I think it is an improving situation.

FK: In this country or in generally?

WA: I am talking about this country, because – it does change in other countries – I thin that there is at last, and I have been doing this for some time as you know, working with the community in a much more creative way, testing things out. Not only in exhibitions. For me, this is a genuine discovery to find that actually people, the ordinary

people in the street – however you like to call them – are actually interested in ideas. They are interested in being different. They are interested in the particular about where they live or work or play. I think it is a very fascinating thing. You could almost return, you could say it is a return of civic pride. In Germany of course there has been a lot of civic pride and it has been quite good. Whether that is Hamburg or any other place.

FK: I was quite fascinated to read about the way you work with clients, with future users with politicians or librarians or with schoolteachers for various projects. An extremely engaging relation with the public [interference in recording] of the design. Is that where you see the experimentation with the public or is this something that could also happen through an exhibition? Or is the exhibition something where ...

WA: Well, I think both. And where one begins and where the other starts is a slightly grey area perhaps. But certainly, let me put it another way, I think today the most dangerous thing, for the architect, is to have an idea about architecture. I am absolutely convinced of that. It's that doing things out of the corner of your eye, your doing this thing, but actually what you're doing over there is much more important. Taking your eye off the ball. Because what that means is that you're more open. So you're not bringing any particular architectural agenda in terms of style or material or anything like. What interests me, and it is exactly the same as painting, and the reason why I paint – I am not painting so much recently but I still like it – is that it is not precise. When you compare it with the 0.2 rapidograph – you are probably too young to remember -

FK: No, I am old school

WA: you may create great precise drawings that have great authority. Painting is not very precise. And also there can be accidents. You're exercising your brain beyond what you know. The next logical step is actually bringing in the people. It is the same as painting. They say things and they draw things and they do things, which are surprising. They take you beyond what you know, and, more importantly beyond what they know. They've got plenty ideas coming from a number of sessions, and you're trying to put them together, you come up with something else that you would never have dreamt of. And of course, I still have this cultural baggage, but then you never avoid that totally. But be aware of it, that's all. Just remember that that's what it is. It might be necessary but that's what it is. You bring something to these situations what you already know and that's what I like to try to avoid. And, therefore in that sense, the work in, say Bradford or Barnsley or some other places has been, you could describe it as a form of exhibition. In that case we tend to use film and show it in cinemas and so forth. As the public of the location to say, we've been through this process and this is where we are.

FK: Well obviously, it led to an exhibition, the Super City exhibition in the URBIS centre in Manchester. What triggered the making of this exhibition and what did it add to the process for you?

WA: To me, Super City was a great opportunity. And it wasn't my idea.

FK: So who's idea was it?

WA: First I made these three TV programmes. They came to me and asked, we would like you to make a documentary and so it was my idea to make those films. And then from that, Scott Burningham (?) had the idea that somehow I could make that into an exhibition of some sorts. And I welcomed that opportunity. Because actually it was an invitation to think about things without a client, which is quite good. And then to express those things into a broad, general debate for that part of the UK. What I liked about the exhibition was there were plenty of opportunities and forms, very often in my absence,

people come and debate some of the issue, the general idea throughout. And I think that was great.

FK: You are talking about the by-programme?

WA: Yes, and they haven't got to the end of that yet. And I think the exhibition is going to Canada in the next year.

FK: To the CCA?

WA: Well, it could be CCA. But I think hopefully it will be Toronto. I like the CCA but in the end that's a citadel of architecture. And that is its problem. Its strength and its weakness. Whereas to get it to a nice place in Toronto would take it away from this particular ... put it in the CCA and it is architecture and urbanism. Put it in a village hall and it is just an exhibition. And I was dealing with that sort of stuff, but it allows people to enter in another way.

FK: But that would transform the meaning or the purpose of the exhibition of being first located within that Super City, Manchester forming part of the Super City and then you take it completely out of this context and show it as something else, as part of you work as ...

WA: Well that's true, but I would wish to avoid that.

FK: How?

WA: I would say, ok, this had some sort of relevance in Liverpool to Hull. By taking it to Toronto... because in Toronto, there is already a linear city there. It's going out to Hamilton. And you could even argue it stretches out to Niagara, it is the densest part of Canada.... And then one makes clear for new pieces or you add to it. And then generate the notion of the Super City in a global way at least in the Western hemisphere way. If you took it to Shanghai, they'd say that's what we do (anyway). It's not even a radical idea there. It just happens. Yet in funny sort of way, the planning constraints in China are less liberal than you find in the Western World. So there is all this stuff that seems to go up everywhere. But actually in each of these site there is more of what I would recognize in our old fashioned way of looking at planning than in Western Europe or in North America. I got this feeling there are breaking out of it, more and more, moving somewhere else. And also from the exhibition – it is slightly early days – but I've got two opportunities to build new communities within Super City. Which would be great. Now this would test the planning.

FK: Where these projects presented within the Super City exhibition?

WA: No, no, they came after Super City. People were coming, saying 'This is very interesting'.

FK: So in a way, Super City was a marketplace as well.

WA: Yes, but it wasn't designed as that. But I am very happy about that.

FK: This is one part of my argument, that you never have a clear cut, just an archive, just a marketplace, just a laboratory. There will always be some elements of the others in each one of them. I think, as a living architect you can't avoid, no matter what kind of exhibition you do, if you put something on display, it will always have a marketing effect.

WA: Yes, and if architect would be truthful they'd say they would hope in fact that is has this effect. But on the other hand, supposing one Super City exhibition happens, supposing at the same time there would have been the six other exhibitions, not about Super City but within that M62 strip. That would be interesting.

FK: When I saw the exhibition I thought that maybe you would want to have this exhibition rather in the drive-through motorway station. Or in the central market place of Barnsley. Maybe at various points that are actually located along that linear city.

WA: That would have been fabulous. Difficult, but fabulous. With a larger budget you could do that. I mean, I would love to build a new motorway service station.

FK: Where did the budget for the exhibition come from?

WA: From various sources. Some from Manchester, some from private sponsorship, Urban Splash for example, who use it as a great marketing tool for CHIPS, and it is very successful. Good luck to them, that's fine. But without there money it would have been impossible. I didn't make any money with. It just covered the costs of all the models and transportation, few hotel bills. But that's alright because it sits comfortably alongside what I try to do here anyway as an architectural practice.

FK: I guess there very quite a few parts that you specifically built or made for the exhibition. I am thinking of the large model right at the entrance.

WA: That's true, but there are some of those arguments that equally apply for the Thames Gateway. Which is another burning issue. Particularly now with the Olympics ... The pressure to build is enormous. With the impetus of John Prescott to say: There will be Thames Gateway. He has not a fucking clue what it is, - and neither has anybody else. Politically it is a highly complicated area because there are so many different statutory bodies involved in it. And it's horrible. Because, you can never get a clear view. There are so many different agendas. But, rising above that you can have a clear concept. My argument with Thames Gateway, I tried someone to fund it, because I couldn't do it out of my own pocket, would be to actually engage, there are a lot of people who actually live in the area who have already ... Is to engage all the people into some sort of vision. Then all these statutory bodies couldn't actually say 'No'. Because they would be saying 'no' to those very people they are supposed to serve. That's the power of actually broadening up the debate from the base. This is nothing new of course. If we are going back to the sixties. There are people like Habraken talking about a democratized architectural process. In a very boring way, actually but nonetheless that's what he was doing. And I was interested in that at the time. There was the notion of the [??] plan. What does it mean? Also, as a student, the Covent Garden redevelopment. People like Brian Anson/Anderson (???) who worked for the GLC and eventually got sacked because he, with ourselves, with the students, initiated the Covent Garden Community, which objected to what the GLC wanted to do with Covent Garden. It's a funny thing for me saying this. Then he got sacked and then three or four of us students got him appointed as a tutor at the AA at the time. As he needed an income. Well the AA doesn't give you a proper income actually but better than nothing. And, so that notion of democracy was another strand at that time. And it is yet another one of those loops which were grapping. It was a very interesting period. Fighting to free of rules (?). Fighting free of huge bureaucracies, that were, in the case of Covent Garden, applying planning theory that had pretty much lost its credibility. And we knew that, however good the architects would have been, the result would have been shit. I still like to think that it's better today in its current state than if they would have knocked everything down and built anew. It wouldn't have so many people in it. The problem now is that there are too many people in Covent Garden. They didn't plan for the pressure. But we didn't have to worry about that.

FK: What year was that?

WA: I think that was 1970.

FK: You started quite early with, well you always have ... worked with or in Fine Arts. Coming through an art college, doing art yourself, paintings, drawings, having strong collaborations with artists. Also your period being based at the Riverside Studios. Do you think that this closeness to art also changed the way in which you use exhibitions? How you work with exhibitions, rather than if you would have been a clear-cut 'architects' architect.

WA: Inevitably, yes. Whether it had a direct view on the notion of the exhibition, I don't know. I find that quite difficult to answer.

FK: I am just asking as I spoke to Joep van Lieshout as well, and for him it was quite clear: he produces a piece of art in the studio, in his workshop with his staff, and then puts it into an exhibition. And that is where it is supposed to be. Apart from an installation that is situated somewhere in the city. But basically, it is something that finds its destination within the exhibition context. Now, when you are an architect and you do as well art, paint, you draw, the exhibition might not be the final destination. It can be for some pieces. Or it can be that it is the place for the experimentation as we talked about it regarding the 1960s. But it might always direct to somewhere beyond that space.

WA: When I was making drawings, and everything else, I was never thinking of making a drawing exhibition. I can be pretty clear on that. I did have an exhibition of drawings, very architectural drawings, at Riverside Studios, when we were residents there. And in a way I regret that. I think it was the worst show that we ever did. Well I should be saying it was that bad. Of course something in it was very interesting and it was very gratifying. ... It was the question, what is in the drawer, should we frame this up or pin it on the wall. I always felt that architecture exhibitions have been very typical (?). I should also add, round and about this period or before Riverside Studios, there was this ART NET which was run by Peter Cook. For me, that was a very important place. And although I participated in two or three group exhibitions, never on my own, I thought they were the least interesting things that of what Peter Cook was doing there. Much more important were things like the Conceptual Architecture Conference. And particularly for me, who was a very recent graduate at that time, suddenly find that you are asked to give a 20-minute talk, over a weekend, you know, Peter was brilliant in getting people together, people like Colin Rowe. 'Well I want you to talk' 'Okay, who else is talking?' 'Well, after you is Colin Rowe.' It was pretty demanding but actually it was very good for me. But much more important than that, was the idea, that it became a forum, which sometimes reflected the work on the wall but didn't have to. So it was an independent place outside the confines of an educational institution. Which I think is important.

FK: Where was it based?

WA: It was in West Central Street, which is actually not so far from the AA ... tiny street, nice, and it is actually one part of the building was the offices of Studio International the art magazine. All the money came from Robert MacAlpine, not Robert, Bill MacAlpine, no, ... one of the MacAlpines. And the money was there and Peter had the rare luxury being able to spend it. That's one of Peter's best qualities, bringing unlikely people together and seeing what happens. And in a way that, for the two years that it really existed, it went on for a third year, but slowly went down hill a bit, those two years were very vibrant and the advantage of it was that lots of people would go, from students to practicing architects to members of the general public. And in the name

ART NET, it wasn't restricted to architects. It would broaden the appeal to a slightly wider field. To me that was very important.

FK: It also meant the architecture was clearly part of the arts? Was that intentionally?

WA: You would have to ask Peter that question. I would like to think that it was. I'd like to think that. And it was much more arty than you would expect, I mean, coming from one member of Archigram. Archigram was very architecturally based. But I got the sense that Peter himself was always a bit decorative in his work, and I am sure he'd forgive me for saying that. That was the great contribution of the time. Money then stopped, which was the original reason, and Alvin then tried to take on the ART NET thing, it didn't work. Being in an educational institution, didn't really have the funding. The important part was the amount money available for wine and food. Very important, for most things in live ... (I going to shut that window, walks of to shut the window). That was important. And that notion of a two or three year period is quite interesting. Because if think forward to the Riverside Studios, which I became involved in 1979, it was really hot for about three years, fantastic place. So I think that's quite an interesting notion. Then you come back to a place like URBIS as a place for generating debate. Because the question is whether you can really sustain that debate of a longer period of time. Or whether it is great for a five-year period, to be generous, and then the debate moves on to something else. I think that's URBIS' problem, but that's another issue. I think it is also interesting, rather than talking about URBIS, to talk in terms of its programme and exhibitions. I don't know whether you went to it when it opened. It was about urbanism. Interesting idea, to have a museum of urbanism. It was highly interactive.

FK: Was that the one on the top floor, which is still there.

WA: It was the whole thing, yet there was one place for temporary exhibitions. But it was failing. People were going, but not coming back, because they had pressed all the buttons. So they new what the buttons did. And then it becomes uninteresting. Nothing to really, - there was a really extraordinary piece of film about live on the streets in Shanghai. That is something you might get back to. Depends on how it is made. Or exactly the same, a large steam engine sitting in the Science Museum. It has its own impact and power. And it is quite, every few month you can sit there and it feeds the imagination in ways the overcurated show doesn't. There needs to be room always for the person, a notion of speculation and then stop. So that if you come back to the Super City exhibition, if you'd really try to explain everything, and justify everything, it would have been terrible. There would have been no room for the imagination of the people who are going there.

FK: The thing that was very good about the exhibitions was that you could have very different experiences. You could go into this corridor with all the information, with all the writing, which for my taste was a bit too much, to dense ...

WA: I agree.

FK: ... but you could also just have the experience of popping your head into this model of the long stretched building...

WA: The village for 30.000 people

FK: You had all sorts of ways to engage with the exhibition.

WA: Also, I was very keen to have of things that would stimulate children as well as older people. As you were saying, you could enter the exhibition at different levels. And feed the imagination. And it was on for four months.

FK: But is there a process or any kind of means where you get all these stimulation back, what is your intention for the public? Do you have any? You put an exhibition out there, it is absorbed, liked or disliked by the public. But there might be a lot of interaction with the exhibitions, through various means, but what are the means to bring it back into the studio or back into the design process? Or into your mind. Other than just a feedback sheet. Is that possible at all when you have an exhibition that runs over three, four weeks, months?

WA: Well I supposed from my point of view, the fact that there is one particular site near the Humber Bridge and there is another near Wakefield, which then I've been commissioned to look at these. Still early days, but that's fun. So in a way you can reconsider some of the feedback, and some of the debates, a lot of them I have in written form, and these are serious debates, so there is some feedback which more meaningful than just a comment sheet, which is often meaningless. And then you have the opportunity to go on and explore some things. And you look an exhibition, and there are just the beginnings of some thinking about something.

FK: For you?

WA: Yes, for me. It is an ongoing work, which will confine its way out in many different forms. Which is why, this is the opportunity to then revisit it in the context of a certain part of Canada. That would be good. I would have to rethink about it. It is a different context, different size of population, different numbers, different aspirations, different climate to your own. That I think is interesting to always be forced in a way to, and it is a pleasurable experience, that is important, to revisit what you're doing. It is an ongoing work. As, what we do as architects is anyway.

FK: You are quoted in the AD 'Arts and Architecture' saying "You have to do thing in order to understand". Is making architecture exhibitions also part of this 'doing'?

WA: Yes, definitely. Undeniably. And sadly, there are not enough venues and not enough money to do it as much as one would like.

FK: So it is an extension of the actual architectural praxis.

WA: Oh yes, undoubtedly, undoubtedly.

FK: Not something that comes separately or something that is purely reflective.

WA: No, to me, everything that one does, is part of the same conversation. It is a new opportunity to look at something in, perhaps, great detail. That building over there, that sketch model, which is a condominium block in Toronto, we have commission for that. What interests me about it is that 15 meters underneath it is an art gallery.

FK: An existing one?

WA: No, there will one. And this has a lot to do with that (pointing at other models). My point is, I recognize that there are certain forms there straight out of the work from the PUBLIC in West Bromwich. It is something you can't escape. And on the other hand you can use these things in a different ways. So the work for the PUBLIC came out of an exhaustive process, not exhausting, but exhaustive process of working with the people in West Bromwich. And the artists, and the public, old and the young, and the criminals, all of them.

FK: You exhibited the project of the PUBLIC, then it was still called C-PLEX – at the 7th Venice Biennale in 2000 in the British Pavilion and you had also a piece in the Italian Pavilion.

WA: What was that piece?

FK: It was a video projection; you also painted the room with black paint.

WA: Oh yes that's right.

FK: They were very different approaches. There you have the finished piece, basically, something like a real project. The other one was far more intuitive and reacted to the space. Did they come from two different angles?

WA: They were more parts of the same thing, at slightly different stages. In regard of this particular model, making the model was part of the designing process. What is under construction, well under construction now, is actually, it owes a lot to the model in Venice, but it is still very different, the whole thing.

FK: The model was particularly done for the Venice exhibition.

WA: Yes. And it was a sort of snapshot (?) to show people what we are thinking. And most important of all, the client came out to see it. We could then talk about it, and the model in itself had an effect on my relationship with the client and ultimately the project. Not a bad thing. And because it was clearly, in the British Pavilion where it was sitting, it was clearly an unfinished and unresolved project. I'd like to think that, and you know probably better than me, because of that it was more interesting to public visiting the exhibition than if it would have been finished. What is the point in showing a model of a project that is already finished?

FK: Or pretends to be finished.

WA: No, you can contrast it, and I am not getting ... Chipperfield, but he a model in the adjacent room and I could not imagine that that would change at all. That IS what they are building, well I don't know if they are actually building it or not. But if the project continued, that's it. I don't work like that. In way, I think that is one of the best things that Cedric ever said to me, as a form of advice: Never take a decision until you really have to. That was interesting, in other words, keep your options open. There are always new bits of information, new confrontations, new realisations that could perhaps squeeze in, that could make the project better. And I thought that that was very encouraging and I never lost that, it has always been somewhere lurking back in my mind. In other words, what I am really saying is that the idea of the architectural maestro is far away from my thinking, it doesn't interest me as an idea. Because I never think I am right. Whereas the whole art of being the maestro, going back to the Angewandte or the Academy in Vienna. That's teaching as the architectural master and pupil, whereas what I do at the TU, we don't do that. We are more interested in what the students do. And trying to assist them to achieve something that they might have seen and having difficulties with. It's got nothing to do with what I do, but with what they are trying to do. And I think it is the same with the exhibition, with the people in the down, with C-PLEX, I still find it easier to say C-PLEX than PUBLIC, but they had an idea, they didn't know what it was. Our job was do things to help them to discover what it was as well as to help me to discover what it was. Or what it is. And that, I think, is a very different role for an architect, as architectural history would suggest that you act as an architect. That is not to say that I have given up on the old traditional values of scale, proportion, all of those things. They are all important and I use than probably more than many other architects. Roman values, Greek values. Because they have

some sort of truth, that doesn't go away, you just apply it to a different kind of conversation.

FK: You mentioned Cedric, and I was just earlier on in the Cedric Price exhibition in the Design Museum. I think you were speaking there at the opening. What do you make of that exhibition?

WA: Well, given the way that Cedric operated, and he did in the rather peculiar nature of his own architectural history, as you know, he didn't build very much, well the Interaction Centre was his last building for which I was the project architect, and that's a long time ago. And what interests me in his later work, the sketches became more and more economic, let's say, and more focused on the concept, the idea, and not necessarily thinking about every detail. Of course there was a certain pragmatic quality in that as well, given the position that he was in, but I don't think that it makes an exhibition, to be honest. I think Cedric is a much more interesting book, and don't think that book has actually been written yet. Sam Hardingham was trying, and then Obrist put this other book together, RE:CP, a book I like actually, I think it's good, but essentially it is a collection of stuff and there is no commentary. And no-one has really had the balls to sit down and think, what does this mean, what was he doing, how does this fit in into some evolution of architecture. And I think now, perhaps, is the time, it's been two or three years since he died, well two years. Maybe within the next two years, with a little bit of distance one could have a different view on it. But I don't think it is an exhibition. I remember, when I worked there, he did have an exhibition at the Heinz Gallery, which belonged to the RIBA at the time. And I remember it very well, because I had to put it up. It was just scraps of paper and drawing pins. I liked that, because it wasn't doing an exhibition, saying, well this is what we did, boom boom boom, it would have been impenetrable to anyone who didn't know either him or his work already.

FK: But I don't think that this exhibition that's up at the moment in the Design Museum is more penetrable or understandable than that sort you're talking about.

WA: Let me put it in another way, there was an exhibition ... at the CCA, which I did see, because that's why I first came to ... [mobile interference] ... It struck me at that time that the exhibition, because there were minutes of meetings, the odd notes, letters, things like that, interesting as a historical sort of document, but it says more about the man than the work. It's like you're presenting 'Cedric, the person'. So in that sense it falls into your first category of exhibition, revealing something about someone who is now sadly dead. I would still rather like to see the book. There was a 1976 book, I think it was or was it a little bit later, 78, 79 maybe, which was published by the AA [1984], nice book, black and white

FK: The square book, very much controlled by himself. Together with Ron Herron, doing the graphics.

WA: And then there was nothing until Sam Hardingham's book, which is also quite nice, I think the paper is too thick but that's a minor point. And then the Obrist book. I think the Obrist book is actually rather good. But it is not making any value judgement about the work.

FK: That's not what he does isn't it?

WA: No, he doesn't, he is a curator. But I think that that book that ought to exist shouldn't be a recollection. It should be a studio's piece of work. Trying to analyse, what was his contribution. And I think that there are a lot of people around who are in awe of Cedric, who would never say anything against him. I am not saying that there is an awful lot that you could say against him, but no one is beyond criticism. And that's what it needs. It would underpin it all. It would actually really be helpful to put it into some

other context, what was he doing. Okay his lifestyle was also part of his work too; you can't fully separate the two. It needs thinking about it. I couldn't do that and in my presentation it wasn't appropriate anyway, I couldn't do that. It was one of the most scariest talks that I have been giving in years, there were at least twenty people in the audience who could have given a more authoritative talk on Cedric than me, you know, there was the range of family to other things (?), collaborations, I found that very difficult to talk, really difficult. ... But Cedric needed criticism I think, on reflection. Sorry, I've been rambling on.

FK: No, no. It's probably a bit unfair to talk to much about other architects but, because it is another type of archive exhibition, and I am actually quite puzzled at the moment what the purpose of these archive exhibitions is, I am talking about the Herzog and De Meuron exhibition at the Tate, I don't know whether you've seen it?

WA: Yes, I've been there.

FK: I mean with an overwhelming amount of material ...

WA: ... Stuff.

FK: Stuff, too much to really engage with. Well apart from a real scholar or fan who is interested in one building, and wanted to go to the depth of it.

WA: I quite liked the exhibition. But to me it looks like an exhibition where they went around the studio, picked up all these sketch models and put it there. I quite like that. But then of course you have to qualify that, that there work, not exclusively, but primarily, is about materiality of architecture. It's the materials, the reflection, the sheer presence of an object. That's what interests them. I don't see in their work anything that actually challenges the idea of function or social change. Nothing. They are very Swiss about that. They play the game, they can put a very nice building together, no doubt about that, not always to my taste, but that is not important, and I enjoyed the exhibition because of the evidence of them playing. But, I am an architect, and there is an element in me that also relates to that, and therefore I can appreciate it. But what my mother might think about it, we will never know, because she is dead, but I don't know, I would imagine that members of the general public would look at it and think, and take things very literally. And what they make of it, I think it is difficult.

FK: Also, because it wasn't didactic in any way. It didn't tell you why they went from that stage to that stage or what the development really was. And what was model number one and which one was number fifteen within that project, and why do you do the changes. Did suddenly the budget go down, and therefore you had to make the building smaller or was it an aesthetic decision.

WA: On the other hand you know you can also say well that mode operation in showing all those transitions of the same scheme, it's a bit like photography. Not all photographers, but some photographers, they work on the basis that they take lots and lots of photographs and when they get to their studio they print all their contact sheets and then it is an editing process. It could be this one, or it could be this one, they take half a dozen, look at them more closely and then choose the one.

FK: But the exhibition doesn't show the contact sheet, it shows already the half dozen.

WA: Generally speaking, yes. On the other hand, if that's their process and if that's what they want to show, fine, it's legitimate. I change things a lot. But, changes come from an exposure to a broader group of people. ... It's not such a formal game. In fact the quality of our buildings is not a refinement, it's not like in industrial design. Which

some are. I sort of maintain that Nick Grimshaw is more interested in the joint that he is in the building. He is, that's what he draws, you look at his sketchbooks, you don't know whether it is a station or a house that he is doing, it's the same thing. So on that exhibition in the Tate, I can say, I enjoy it for what it is. I quite appreciate that. On the other hand, the fact that it is just like a photocopied sheet, which is catalogued, their on their website, I don't know whether you've been to it, it's like completely understated, it's like it's typed out on a 1965 Remington portable type writer. It's like this undersell is now the style.

FK: You can't even find the Herzog and De Neuron Website on the search engines.

WA: Not so long ago I found it. It is not very rewarding when you get there, but ... It comes to this issue of style, which has a lot of relevance to your theme of exhibitions. You know, when this anti-style becomes a style. Because, they are full of style. Totally, the way they behave, the way they dress, all of that. It is not very relaxed. I am anti-style. Really. Well by that I mean, when you work in the way I do with people and listening and almost like a painters (?), it sounds a bit derogatory but it is not intended that way, you can't have a style. You got to be able, you can have a few things in your pocket in case anything goes wrong, of course, I wouldn't deny that. But generally speaking I don't do that.

FK: Can I ask you a last question: What is the exhibition you want to do?

WA: That's a difficult one.

FK: Where would it be? What would it be?

WA: Well, funnily enough it is not such a, it is a very current issue in my head. [Have another drop of this] In 2008 is the Year of Culture in Liverpool, which I know rather to well (chuckles). It also coincides with the Liverpool Biennale. The Liverpool Biennale is quite ambitious actually. Which is good, not always good, but ambitious and I like that. And the curator of the Biennale is Louis Beaks, who is a quite interesting man, very nice man actually, and he asked me and Bruce [McLean] whether we'd like to do something. Twelve months ago. I am now ready to ring him up and say 'yes'. I've been thinking about it and what I would like to do is to build the third Liverpool cathedral. As a non-dominational space. Whether this can be achieved this I don't know yet. We are not talking about a huge thing. But to make a space which is ... spiritual. It is not aligned to the idea of religion apart from ... cathedral. So it has no other function than to lift the spirit. That's what I am thinking about.

FK: But is that part of an exhibition, like the Liverpool Biennale, or is it an exhibition in itself?

WA: Well of course, it is a part of the Biennale, but would be a discrete part of it. And even if the rest of it didn't exist, I would still like to do it. So it is not done because it is part of something bigger as in the case of the Venice Biennale. Venice, and I am talking about exhibitions in general, the Venice event, if one is honest, what are you really enjoy about Venice the most. What I really enjoy is that there are all these other architects there at the same time, having a good time. That's really what it is all about. You walk done along a street, and you go into a bar and you see someone that you haven't seen in a long time. It is a social event, very enjoyable. The work is somehow an excuse to have the event. And I will certainly at the next one, because Ricky Burdett is the next curator of the Biennale, quite to my surprise, and I think to be fair to him, also very much to his surprise too, the theme will be about cities inevitable and we will be having a conversation in September when he is back from Italy, but whether I really want to do something specifically for the Venice Biennale? If he'd ask I probably will, but I have no burning ambition to do something. Because, it's too much, the whole

thing. As indeed the art biennale is too. One year, with Gareth Jones, my great ... who is an artist and now lives in America, we decided, we'd go to Venice for two days and we would see everything. As an exercise. We'd stop for a good lunch, but apart from that we would see everything. And we did, it was exhausting. But it was an interesting exercise because what you could see, and this is maybe the point of the art biennale and you could also say of the architecture biennale, although there I have never done it, if never seen everything of the architecture biennale, is, you then sit down for dinner at the end of the second day, you've seen everything, what do you say, the state of art today is in a pretty dire state. It led to an interesting debate over supper, is that the case or not. I suspect, if you'd do the same in the architectural exhibition you would go out and say, computer rendering are not very interesting. They have a very important function and purpose in what we do, but in the context of an exhibition, they don't make a good exhibition at all. And that's why we spend a lot of time involving the idea of films, what we could do, it is still a long way to go, it was a bit pioneering then, because what you can find with films is that it engages people in another way, models always work well, ... they are very informative, and some sort of insights in someone's peculiarities, the odd sketch.

FK: With the films, do you start to work with directors?

WA: Well I do, but the director is my son, Oliver and his champs who are just done there. And he is very good. It is almost an in-house facility. On the other hand I would like to do something, and I have discussed it, with a Spanish filmmaker, Bugas Luna, - I always felt he should be in a partnership with Massimiliano Fuksas. Fuksas and Bugas would be great, but anyway, that is another question. Because, I think, he would be asking questions of me that I may have not asked before. And that to me would be the interesting thing, whether it would be interesting for anybody else, I don't know. I can't predict it. But that is the whole point.

FK: The point of doing it?

WA: I didn't know what the Super City exhibition would look like. But, there is stuff, you begin to put it together, begin to play with it, begin to try something.

FK: There was no curator?

WA: It was principally done by us. Although I found Scott Burnham a good person to work with. He wouldn't interfere, but he would remind you of certain things at the right time. And he had great enthusiasm as well, which is important. An important quality. He is also open minded, ... you could if you're cruel. But if he has to do something it is different. The very survival of URBIS, because they are up against it. Actually, from what he has been telling me, the visitor numbers have been very high for this for this exhibition. So actually that has helped the whole thing. But I can't imagine what they are doing next. ...

FK: Good, if you still have some time ...

WA: I think your subject is very interesting because, as far as I know, but you might know better than me, not much done about it. Has anyone dealt with it.

FK: There is almost nothing. There are bits and pieces. There is one book called the 'The Art of Architecture Exhibitions' done or edited by Kristin Feireiss.

WA: Right.

FK: Basically, summing up here time as a director of the NAI in Rotterdam. Including a few essays, amongst them essays by Jean-Louis Cohen or Catherine David.

WA: Did you know, and forgive me if you did know this, that the NAI in Rotterdam is the least visited museum?

FK: It is something that Stuart MacDonald likes to stress every time he speaks on the subject.

WA: But I think it is interesting, you know, because there is this facility, and the only exhibition that I remember well, was the one by Libeskind. Because it was big and bold, okay the show was a bit over-designed, but that didn't matter. But generally speaking they have not managed to make architecture and urbanism life in people's minds...

FK: Which is absolutely amazing in a country that has such a large visibility of good architecture, a high standard of the everyday architecture.

WA: There is a level of debate.

FK: Yes a level of debate also in the newspapers ...

WA: It is interesting; I am quite intrigued by it.

FK: On the other hand, place like the Lighthouse in Glasgow, who claim that they had over a million visitors in their first five years of existence, they have a lot of children programmes, school programmes, workshop programmes. So whoever takes part in these activities, that go beyond or run parallel to the actual exhibition is counted as a visitor. And if you have, and the Lighthouse has this agenda of, a real community and educational institution, through the Scottish Executive and through the funding they are getting, so if you have that than immediately your visitor numbers go up. If you have hundred-and-fifty schoolchildren per day that come through it. But it is interesting to see that you have some places with these high numbers.

WA: I don't know the numbers of the NAI. But I know that they are low. On the other hand what would be interesting to say is that I do know that a specific building like, let's say Peckham, has 38000 visitors a month. Now, once it settles down it will be three times the amount more than it was designed for, but I am not complaining. Of course people go there because it performs a function. Other people go there not for that function but they go there for other reasons. This is very interesting. Not because it is a building by me but there are other buildings that draw people to them and in a way that is a form of architectural exhibition. The building itself. Did you know that there are more people in the UK in churches from Monday to Saturday than there are on Sunday?

FK: I can imagine that.

WA: Clearly there is a historical dimension there, but I like to think, that people go there because they are wonderful spaces. And there is this sensuality in experiencing these spaces ... I think that this is really an interesting figure. I guess you can assess this notion of space and experience very clearly, because in this country, for the right or the wrong, no-one beliefs in God, therefore they wouldn't go for any other reason. They are not going for spiritual reasons, and I think that's fascinating. How many people are in somewhere like, let's say, York Minster.

FK: Yes, it's packed on every weekday.

WA: 'Sunday, oh no, we better wait for Monday'. People respond to that.

FK: I mean it is not just churches. You have this architectural tourism that started maybe in the nineties and really became more and more popular with people deliberately going cities because they have an interesting historical or even contemporary architecture. You only have to mention the Guggenheim in Bilbao. No-one is going there because of the art, no-one can claim to remember what kind of pieces of art are in the building. The same with the Jewish Museum. The people are not interested in the Jewish history.

WA: Mainly they are not.

FK: Yes, mainly they are not, some of them of course are. But people are going there because of the experience of the building.

WA: Yes, I think that's fair enough. And it doesn't always have to be as extreme either. I mean, I think that some of the ... in certain part of Hamburg are rather good, people like it. In fact it is something that I must challenge Egbert on. Not challenge, I must ask him. But, see I thought that was very intriguing, in 1985 which was the first Bauforum that I attended, which was to do with the old Fishing Harbour, a) it was a terrific event, b) in a way it was an exhibition because people were working in the public gaze, and there were some debates going on alongside, you remember it I am sure, and then there was a party. It had all this different levels. And it had investors and politicians coming in. But talking as someone who participated in it, working under those conditions, was very nice. You were on exhibition but you also ... And what I want from Egbert, are some photographs I am missing. I want a photograph of that whole area before the Bauforum, I do have some of the Bauforum of course. And then of course, coming after that was a whole series of analysis, and putting together, with a very loose master plan, which was intelligent. And then we had the Ferry Terminal competition, and other competitions, it's not all finished yet, but the point is, there a lot of people there now, also on the weekends. And there is a sort of natural evolution. And I don't think that everything there is fantastic. But 85 – 2005, to going from something not being on people's mental map to something that is on people's map. That is extraordinary. In fact you don't have to come to 2005, 2000 is enough and that is fifteen years it changed a significant part of Hamburg. And that is a story, I want to put that on our web site, because there are very few urban designers / architects who could tell that story. This is how it was and this is how it is today. Can you me any other part of a city that does that. If you think of all the exercises that have been done in Glasgow for example

FK: Not much to show

WA: Pretty fucking empty, isn't it.

Interview with Jean-Louis Cohen

Conducted on the phone, 17.08.2005, Full Transcript

FK: I just found out that recently, in June, you held a talk at the Berlage Institute and the title was "The Architecture Museum – Illusion of Reality". Maybe we can start with that. Do what did the illusion and reality refer, were you talking about the architecture museum in general or about a specific project?

JLC: I was trying to, in a way I was ... a museum in itself. Are you taking notes or are you taping?

FK: A yes, sorry. I am taping it. Is that okay? But I would make a transcript first and send that to you for confirmation.

JLC: Perfect, so I can just speak. Well, I was just trying to document and ... the moment in the making, in what has been the identity of the architectural museum has been from the eighteenth/ nineteenth century onwards and trying to discuss its relationship with current issues in the relationship between professional architectural culture and the audience. I don't know if you are familiar with a booklet that I made on the Chaillot project, the Cité d'Architecture.

FK: Unfortunately I couldn't get hold of it until now. I have it on my list of books I still have to get and read.

JLC: It's not exactly the Berlage talk, but what I can do is send you the two pieces I wrote in Cité Chaillot book. I could email them to you.

FK: That would be fantastic.

JLC: The point that I was making that leads me back to your enquiry, relative to architecture exhibitions that they were in fact two traditions, two developments. One being the exhibition of architectural object on the model of art exhibitions and the other being the full size exhibition that developed from the international exhibitions in the nineteenth century to colonial exhibitions and of course to various times of full size shows. So I was trying to relate these two traditions

FK: I think that is very interesting, the approach to coming from these two traditions. Do you see, that they live parallel to each other until today. Or did they merge at some point.

JLC: They are ... intertwining. If you think for instance at the Weißenhof Siedlung in 1927 where you had a collection of buildings but you also had an exhibition with maps and plans and photographs as two-dimensional objects discussing other types of buildings. ... If you, and this is one example, if you refer to the period at the Museum of Modern Art in New York, beginning in the forties, you had drawings and photos on the wall also houses in the courtyard. From Breuer to Frank Lloyd Wright to the Japanese House. So you had often the sort of go-between these two aspects. Trying to reproduce or to also get recognized the ... meaningful planning and experimental construction. So I think that the fact that exhibiting architecture or exposing architecture there is of course a conceptual difference. You might want to elaborate upon. I think it deals with objects that are 'marked' art (and?) exhibitional objects. (But are certainly not art????)

FK: So in a way they are pointing to something beyond the exhibition? Rather than a piece of art that might be ...

JLC: The question is: what kind of architectural experience is suggested. Is it simply suggested by a pavilion or by a fully furnished house. At the moment in its life it is conceived as a public place before sinking into the private realm. From Darmstadt to Stuttgart and other places. So I think that the point I wanted to make was to enlarge the cultural project called exhibition.

FK: How do you consider the aspect of temporality in regard of these building exhibitions like the Weißenhof? Would you say that it is still an exhibition of architecture?

JLC: It is an exhibition that survived with (great trouble???) . Of course it was meant to survive so it was built rather solidly if you compare it with other buildings. If you look of course at the way, one interesting case study to seefor instance is the difference between the Esprit Nouveau Pavillon and the one built in Bologna, of a different technology. Or the problem I had, when I tried several years ago, dealing with the reconstructions, the proposal construction, of the Melnikov Pavilion. Rebuilding it and adjusting it even minimally to contemporary standard in terms of fire regulations and simply structure would have completely have destroyed its magic. I think that there is a certain frailty and contextual to exhibitions structures ... that makes their extended duration impossible.

FK: Maybe we stay with the Melnikov Pavilion for a second. How do you consider this 1925 exhibition for Melnikov as a testing ground to develop constructivist architecture? Was that something that was only possible in exhibitions?

JLC: If you'd say to Melnikov that he was a constructivist, he would have killed you. He was not a constructivist. Never wanted to be one. He almost threw me out of his house in 73 when I was telling him that I was working on a constructivist ... I just had to tell him that I wanted to work on him. No, but I think that everything was experimental in modernist and especially Russian modernist, because before 1925, well the only other exhibition pavilion, the agricultural exhibition is very interesting ... But it is clear that exhibitions are in a way, allow for simplification, when the buildings are not meant to survive forever, they allow for more freedom in respect to *firmitas*, to in respect to durability etc. And they can make bolder statements.

FK: So they allow maybe architecture to achieve some sort of 'purity'?

JLC: Yes, I mean, they can reinforce radicalism.

FK: I mean, this is of course one type of exhibitions, which is used as a testing ground for emerging architecture. In your essay 'Exhibitionist Revisionism' you stated the other very important aspect of exhibitions that become almost the prime outlet for scholarly research. Are we here talking predominantly about something that could characterize the exhibition as an archive?

JLC: I wouldn't say archive. Because an archive is much broader than that. But an exhibition is in a way, I would call it a sort of booster in historical research.

FK: Booster for knowledge itself?

JLC: It enforces the publication to match her. It forces reluctant archival curators to let stuff leave the drawers and be shown on the walls. So an exhibition and the potential mobilization, that you can't reach with a book. Also exhibitions give to books an audience that they would never have or they never get ... books.

FK: So the crucial point in making those exhibitions is actually the public then?

JLC: Yes. If you look at the variety of these exhibitions, there are all sort of varieties of audiences behind these exhibitions from the local show – for instance the most popular exhibition, apparently, the two most popular exhibitions of the Canadian Centre for Architecture in Montreal where the once that were dealing with Montreal. The audience that came was not a specialized audience. It was an audience that had an expectation in terms of discovering episodes and knowledge about [their city]. The academic audience is marginal and marginalized. In other cases, exhibitions, in a way, find an audience according to a patter of adjacency. When an architectural exhibition on architectural history is in a museum next door to a major Picasso exhibition there will be a sort of instant audience that it very often curious and that works on the Pompidou Centre.

I think, the discussion of audience is extremely difficult. You have professional audiences, sophisticated and certain audiences also with a sort local patriotism that pushes people to go and see [an exhibition]?

FK: In that respect the diversity of the public can be a problem for the curator and the institution.

JLC: I don't think so. I think it is an opportunity. It can be incentive to be innovative, to get away, to break with the exhibition of frames on the wall. Not necessarily, demagogic displays. But displays that can be exciting ... sometimes illusionary, but simply convey also the meaning of the architectural object in certain aspects of time, and certain other aspects of culture. For example, I like a lot the sort of shows produced by the Centre for Contemporary Culture in Barcelona, linking cities and writers. Kafka's Prague, Joyce's Dublin, etc. And in fact bringing into this institution many more people than to an exhibition on Czech cubism or Dublin architecture of the nineteen-twenties.

FK: So in way, putting architecture into a wider context of cultural production?

JLC: No, I wouldn't use the term context, because I don't like the term context. I would say, using the mediation of literature or, in other instances the mediation of film, or the mediation of politics. I think the question of exhibitions, of architectural exhibition of simply putting drawings and objects into a certain order, ... put according to a certain pattern of knowledge that can be related with other realms of culture that are in a way less frightening for the audiences. I am convinced that architecture is very often a very frightening discipline for the lay audiences.

FK: Because of its codes and complexity?

JLC: Yes, people also feel to have a certain complex of inferiority in architectural exhibitions unless they are dealing with they are dealing with characters who are widely known for good or bad reasons like Frank Lloyd Wright or Gaudi or perhaps even at some point Le Corbusier ... I think that you have to reach out to these audiences by trying to base your project on knowledge that, on a type of knowledge they have instead of picking down to them.

FK: Do you think that the audience would have had the same problems in the late eighteenth, early nineteenth century Salons in Paris where architecture was also exhibited alongside other pieces of architecture?

JLC: At that time, I think, architecture and its codes were rather stable. ... I also think that the audience was much smaller – it would be interesting to compare figures – but it was a very professional audience. I don't think you had a large audience in the Salons, you had a learned audience of people who, architecture was still presented in a very conventional way with picture-like hanging of drawings. Nothing was as mysterious and complex and perplexing as it can be today.

FK: So did this distancing from a general although limited audience only happened once the exhibitions found their place in the architectural institutions, like in the early academies or professional, the first architectural museums?

JLC: I don't quite understand the question. Did it only happen then?

FK: Yes, when you say that "until then" or in the salons it was still integrated (in the exhibition)

JLC: No, I think that at that time they were, - Architectural exhibitions as we know them. These are relatively new, relatively new cultural products. Architecture was of course shown in Salons, they were no thematic exhibitions as such they were sometimes, I don't think that there were many retrospective shows on architects, there were sometimes historical shows. There were some historical shows where architectural drawings were shown. So it was certainly not the same spectrum as the one we know.

FK: Is it possible to pin down the moment where we have, when we can speak of the first proper architectural exhibition?

JLC: Embarrassing question.

FK: Because, I tried to find a point. And yes we have the first architecture museums emerging in the mid-nineteenth century, we have them in London and Paris, we have some collection but there we still have an overlay of showing casks or architectural ornament rather maybe than that what we would today call architecture. I don't know.

JLC: Oh, I think you have to go back to the Salons where you had an architectural department in the end of eighteenth century and perhaps to [Rome?]. Then, well I think that perhaps. Well in one instance the situation is very clear and the architect, the town planning, the 'Städtebau-Ausstellungen', there the situation is quite clear, it starts in the early twentieth century. One in Berlin and then some small ones for Dresden or ... It's quite clear. In terms of architecture one should perhaps look for the exhibitions of competitions, competitions projects. I am convinced that some of the major competition of the nineteenth century led to exhibitions. Of course ... but after all they belong to the genre of architectural exhibitions.

FK: Can I ask you generally, because you have been writing a lot about architectural exhibitions, or the forms and modes of display in like in the essay on models that you published in the book by Kristin Feireiss. What do you consider the burning issues in this field of research? Because to my knowledge there hasn't been done an awful lot so far. What do you consider as very interesting?

JLC: Well, now there seems to really serious development of studies that are trying to document exhibitions as cultural and theoretical events. So mostly, well a lot is written ... on some exhibitions designed by Le Corbusier, on the role major large audience expositions like ... that architecture ... So, I think there is a sort of monographic fabric emerging. The question is perhaps to try to shape a more collective project, there, one could dream of a book on the history of architectural exhibitions done with all the best scholars teamed together in a document. So what it needs is a, in respect of the question you were asking 'when was the first one?'. The fact that you have to ask this question points to [a lack of research about it]

FK: Maybe, it is not an important question, I don't know, maybe sometimes one doesn't have to pin down the first one or there are several ...

JLC: No, but in a way it is interesting that you can, well at least you can point out to the first iron bridge, perhaps also to the first skyscraper, it's already difficult to point the first concrete building, reinforced concrete building. Architectural exhibition as always said is a rather illusive category. So I think that one of the, there is an interesting ... effect of the exhibition, of their collectivity, the kind of stimulation they had. I was reading recently about Le Corbusier, ... were clients visit him, or deal with him because they had seen the 1922 Salon d'Automn displays or the 1925 Pavillon de l'Esprit Nouveau. So it's clear that the exhibitions have a sort of commercial function. And it would be interesting to try to map the function as well as the critical function of it. How many exhibitions have tried to establish new physical paradigms? Probably not many of them. How did it happen? I think the investigation of the perception of exhibitions is an important question. It has been done by several people in a more or less superficial way.

FK: No, I agree. And for my own research the focus on the function of the architectural exhibition is quite important. That is why I try to work with certain categories, and one which I am predominately focus on is the, as I call it, Laboratory where you use the exhibition, particular as an architect, use it to experiment, to develop new forms new forms, new social relations etc. And I try to figure out what kind of role these kinds of exhibitions play within the architectural praxis.

JLC: Yes, but at the same time you have to be careful with the concept of the Laboratory, of the metaphor.

FK: Yes, I am aware of that, but maybe you can dwell on that point a bit. Because I have my own suspicion why I have to be careful but maybe you can...

JLC: I think it is a useful metaphor, but only a metaphor. We should not forget that a laboratory is a place where planned experiments take place. And sometimes of course you discover by accident. But some, in a way, are planned. So I think that basically an experiment is a protocol in which a hypothesis is made which, in a way, is confirmed or infirmed according to a certain set-up of instruments. So the question is if you are using the term of experiment then one point you can make is that laboratory to conduct experiments in physics or chemistry or anything, in a way reduces the complexity of reality.

FK: It has to blank out reality in a way

JLC: So, in this respect, shaping an architectural object in an exhibition also means reducing reality. For instance the question of durability I was mentioning and the discussion about form can be made without questioning the need for 'extension joints', (I don't know the exact term for extension joint). So I think, if you are using this term you should really use it carefully and perhaps also connect it with the conceptual investigation, with philosophy and sociology of research. I very good writer on this topic is, on the sociology of scientific research, one of the most inspiring, is a guy called Bruno Latour, a French who is teaching at MIT. He has work a lot on the sociology of scientific investigation. I made millions of books and made very brilliant exhibitions. Recently also, one very good one in Karlsruhe. On the question of democracy. Very abstract ...

FK: Well, that was a very good closing remark.

JLC: But Florian, what I can do is send you these texts I made for this book, of course in French

FK: That doesn't matter, my reading ability is okay but I was just ...

JLC: It will perhaps overlap with other stuff that I have written in other places

FK: Well welcome for taking the time.

JLC: You're welcome.

Interview with Kristin Feireiss

Conducted in Feireiss' flat, 01. December 2005, Interview conducted in German, German interview Notes and English Translation, (No Audio Recording of Interview)

KF: *Nur 20% der Ausstellungen sind die die sich mit Architekturvisionen beschäftigen. 80% der Ausstellungen sind Ausstellungen über bestehende Architektur bzw den Prozess der zu diesen Architekturen führt.*

KF: Only twenty percent of architectural exhibitions actually deal with architectural visions. The rest are exhibitions that deal with existing architecture and the process that led to these architectures.

KF: *Warum macht man Architekturausstellung? Zum einen um eine Arbeit, eine architektonische Position in einen Kontext zu setzen. Vor allem aber will man, neben diesem intellektuellen Aspekt, auf emotionale Weise berühren und provozieren. Und dies vor allem bei einem Publikum das sich nicht primär für Architektur interessiert. Um dies zu erreichen muß man Raumerlebnisse schaffen.*

KF: Why does one do architecture exhibitions? On the one hand to place a certain architectural work, an architectural position into a new context. But besides this more intellectual aspect, one really wants to engage and provoke an audience emotionally. And we are talking here predominantly of an audience that is primarily not interested in architecture. To achieve this one has to create real spatial experiences.

KF: *Wichtig sind hier verschiedene Ebenen des Zugangs zu einer Architekturausstellung zu schaffen. Profis und Kinder müssen gleichermaßen Zugang haben.*

KF: Important is to create different levels of approach to an architecture exhibition. Professionals and children alike have to have access to the exhibits.

KF: *Man muß hier auch neue Formen der Darstellung und Vermittlung finden. Diese können sowohl aus der kodierten 'high-level' Welt kommen, oder aus der 'low-level' Welt wie zum Beispiel der Comics oder Musikvideos.*

KF: One also has to find here new forms of presentation and mediation. These can come as much from the coded 'high-level' world, or from the 'low-level' world of, for instance, comics or music videos.

KF: *Architekturausstellungen sind ein Medium um Architekturgeschichte zu 'schreiben'.*

KF: Architecture exhibitions are a medium which is able to 'write' architectural history.

KF: *Die Ausstellung beginnt vor dem Museum, sie muß Teil der städtischen Kultur sein.*

KF: The exhibition begins already outside the museum, it has to be part of the urban cultural context.

KF: *Entscheidend bei großen Ausstellungen ist auch der Zeitfaktor das sie mindestens zwei Jahre Vorlauf brauchen.*

KF: In regard of large exhibition, the time factor is crucial as they need at least two years of preparation.

KF: *Es ist wichtig, Themen hervorzuheben die momentan nicht Teil des Mainstreams sind.*

KF: It is important to dig out and present topics that are momentarily not part of the mainstream.

KF: *Ich bin nicht daran interessiert 'Architektur als Kunst' zu präsentieren, - wobei dieser Ansatz nicht besser oder schlechter wäre als andere auch, er ist eben nur anders. Entscheidend für mich ist der Prozess und der Kontext. Deshalb braucht es auch immer einen Katalog zur Ausstellung, der Katalog ist wichtiger Teil der Ausstellung.*

KF: I am not interested in presenting 'architecture as art', - although such an approach is per se not better or worse than any other, it is just different. Crucial, for me, is the process and the context of architecture. This is why an exhibition always also needs a catalogue. The catalogue is important and integral part of an exhibition.

KF: *Selbst wenn der Architekt Architektur nur als "Kunst" betreibt so soll sie trotzdem durch zusätzliche Information erlebbar werden. Wenn dies gelingt, dann ist es ein Erfolg für mich.*

KF: Even when the architect conducts architecture only as 'art', I nevertheless want to make this architecture perceptible through additional information. If we achieve this, then the exhibition is a success for me.

KF: *Die architekturtheoretische Positionierung des Kurators und konsequenter Weise der Ausstellung, ist nötig. Allerdings ist es entscheidend das Architekturhäuser nicht dazu da sind architektonische Stile zu promoten. Dies wäre vor allem ein Mißbrauch ihrer Position wenn sie, wie zum Beispiel das Nai oder auch das DAM, einen staatlichen Auftrag haben.*

KF: It is necessary that the exhibition curator, and consequently the exhibition, take a position within the discourse of architectural theory. However, it is crucial that exhibiting architectural institutions, like architecture centres, are there to promote a certain architectural style over another. This would be more than everything an abuse of their position, in particular when they have, like the Nai or the DAM, a public duty.

KF: *Die Architekturhäuser können und sollen auch Kritik liefern.*

KF: The architecture centres [Houses of Architecture] can and should also provide a critique.

KF: *Für den Kurator ist die Zusammenarbeit mit den ausstellenden Architekten sehr wichtig.*

KF: The collaboration with the exhibiting architect is paramount for the curator.

KF: *Die Architekturausstellung muß immer auch eigenes Projekt sein.*

KF: The architecture exhibition always has to be a project in its own right.

KF: *In diesem Projekt muß immer auch etwas neues entstehen. Es geht um ein gemeinsames Testen von Architektur durch den Architekt, den Kurator und den Besucher.*

KF: And within this exhibition project something new has to emerge. It is about the concerted experimenting and testing of architecture through the architect, the curator and the visitor together.

KF: *Es geht darum neue Wertungen vorzunehmen, neue Formen der Analyse zu testen. Ob dies in großen oder kleinen Ausstellungen geschieht ist egal. Wichtig ist das Neues entsteht und Altes überprüft wird indem es in einen neuen Kontext gestellt wird.*

KF: It is about making new judgements, about the testing of new forms of analysis. Whether this happens in large or small exhibitions doesn't matter. What is important is that something new created and the existing is scrutinised by putting it into a new context.

Interview with Massimiliano Fuksas

Conducted in the Ritz Hotel London, 15.02.2006, Full Transcript

FK: My PhD is about architecture exhibitions, particularly exhibitions that use the exhibition as a laboratory. Exhibitions, which can be used to experiment. You stated that the Biennale that you organized in 2000 was a laboratory. You wanted it to become a laboratory. Could you just explain a bit more what you meant by laboratory.

MF: That is exactly what afterwards did not happen, because the last two Biennales were exactly against this concept. A laboratory is that people try to have a, to see if it is possible to have a vision. Not of the future but a vision of what would be our life and which kind of solutions an architect can give to so many problems that we meet in our life, in our daily life, also in the city. The first was for me to have a confrontation between our crazy world, with war, immigrants, environment, disaster, what is transportation, energy problems, etc, etc. And what, we the artists, what we can do. Someone said we have no possibility to change. Then we do our small nice, beautiful project and we forget. I do like if it doesn't exist. We are living in Hamburg, perhaps, and Guantanamo is so far. Or perhaps, Catherine and Rita they are so far, we live in Taormina, we are so happy, and we are doing our small project, or we are in Canada and the Iraq war is far. We are not touched really, we don't care. There is some sickness that we don't want to see, to know. We are a little bit disappointed when we watch this in television and we read about it in the newspapers.

FK: But you are the opposite?

MF: I am the opposite. Then I think that we can try to see if we can – this is completely, this can be a paradox. If we can build a town for twenty million people. And these 20 million can live very well, can be happy, can be kind, can have a good relationship can be healthy etc. etc. Why we don't try to do it. This is the question. The money? There is a lot of money. There are a lot of possibilities if do not build no more fighter air planes, we can ...

FK: We can shift the money.

MF: Yes, we shift the money. Then we can have a fantastic future. Then there are two possibilities. Like I say, we can make like in before in 2000 when everything could be possible, high tech, research, and education, everything around this. Or we can go on further with the war, fighting, with the oil, and with the army. I am for the first solution. And I think, exhibitions, Ausstellungen, can be now useful to show this. I think it is the right period, it is the right period.

FK: Is the exhibition the special place for that? Is the exhibition predestined to take this role?

MF: I think, the Biennale was interesting because before me it was Hans Hollein, he did a very good Biennale, a smaller one, because at that time he had less money and less space. But he was also in the same mood. To say, architecture is like a seismograph, and the architect like a seismographer of the time. And I said, Less Aesthetics, More Ethics. But in a way this is to say, we are not only seismographs, but we decide. We have to make a decision, we choose, what we want.

FK: So was Hans Hollein more a seismographer and you understood your role more like an activist.

MF: Yes, he was before me (?). He was before me.

FK: And after that, we suddenly we didn't have architects as curators but ...

MF: We came back, we came back, in academic way, to show exhibition, to show building. But this we see, we know, because there are all the newspapers, all the magazines, nothing new. What can be new is thematic, in exhibition, like thematic way to show something. ... there are a lot of problems around this. I met a few minutes ago Peter Cook and he told me that Hans and Peter they speak together at the time, and they said it was not easy to find a solution. Because the solution is difficult, but it possible.

FK: How did the Biennale influence then your own work, after that?

MF: Enormously.

FK: What did you take from it?

MF: I think that after 1995 I had a big crisis. A big ideological crisis I can say. Because I was, I started to think it was possible be more useful to be part of a process. Architect like part of a process, this was my obsession. And then I had my project in Jaffa, for the Shimon Perez and Arafat Peace Centre. And after that I say, I thought that is the way. I felt to be useful for the first time in my life. Like an architect. After, I worked more for the, I discovered a lot of things, that it was possible to do architecture without compromise. To do architecture as a movie which you show some positive things of our society. The quality of building, the intelligence, the creation and the production. The creation and production this is fantastic. Because this is culture. Then culture is the only one interesting thing, really interesting in our world. What is culture? Culture is a lot of things.

FK: It is a very broad term. It has political implications, it has

MF: Yes, then you can have, your culture is not out of the world, you can making work, you can making decision, you can choose.

FK: Is that an international culture?

MF: We are in post-globalization, we are not in globalization, we are post-globalized.

FK: What do you mean by that?

MF: Post-globalization is not the first period in which people try to export, import, to make business, to speak the same language. Particularly, it is a period in which there are many identities. Identities. There are many possible opportunities of the new consummation way. This is also the consummation, consummation and the consummation system, is not all ugly.

FK: No?

MF: No, no, it's ugly because you think, we think that if we are in a nice place, with a nice coffee and a nice tea the others can not have the same. But everybody can have the same. The problem is to launch the research, education and research, education and research.

FK: Yes, I think as well.

MF: ... to say, like in the socialist system, or in the proto-capitalist system, there are rich and there are poor, or we are all poor.

FK: You want us all to be rich.

MF: Yes, we can be all rich. But which kind of richness?

FK: A cultural richness.

MF: Yes, this is the cultural richness. The cultural richness, that you have education, research, quality of life, health. You see, think how this could be. It is possible. I am not afraid. I don't think I am a crazy man. This is I discovered with the Biennale. I discovered that out of a lot of architects, only a few were ready. The others were completely fixed in the same way to have a fixed ... or gold medal or something like this.

FK: So which works within the Biennale, would you say were successful; successful in that way that you envisaged it.

MF: I think there were a few ones. Because the big screen, three hundred meter long, was not, for me is an installation, but is not, it was the question, it was not the answer. The answers, I think there were a few ones. I think there are, Duncan Lewis, I think of somebody like, some artists, I don't remember the name but. I also think, Richard Rogers. Perhaps that he has a little bit old, but engaging. Or there is someone like, people like, Gary Chang, the young Hong Kong architect. He did the grill where people could sleep there. I think also in some way Isozaki. He also asked, what is religion. Because I also touched on the religion question, fundamentalism, you remember also the images of Mecca in the film. I was really full of the question. After, unfortunately, everything was quite predictive. But I think it was, I can't remember all, but there were a few one very, very strong.

FK: Do you think it is very important that we, as architects, look into other disciplines?

MF: Oh yes, we can't live without it.

FK: You said it is an art. (?)

MF: We are part of art. We are part of art and the art is part of architecture. Music, everything, Music and movie, all, people, live, weather, nature, disaster, everything, country, it is all part of architecture.

FK: And it is therefore important to incorporate these aspects into an exhibition? The Biennale obviously was a very, very big exhibition. Probably one of the biggest architectural exhibitions in the world. Can you achieve similar things with very small exhibitions?

MF: I think that this is not possible. I was in Milano for a press conference about the 'Salone di Mobile', they use one million square meters. All the new exhibition space for a new fair, one million. They arrive inside with a tube. I think this is a period where it is impossible to do a small exhibition because we are too many. We are six billion. There are three billions more that are coming from the East. And they want to have exactly and perhaps more than we have now.

FK: So as an architect you don't do small exhibitions anymore?

MF: You cannot do them. Yes my exhibition of 1000 square meters in Rome, because they want to celebrate me, but this is, we can make also a video. I think what is important is that you have a really the scale. Our scale is the town, the city, the world.

FK: And then whether you act within that through your architecture or through exhibitions is that the same for you?

MF: It is the same.

FK: It is the same?

MF: I did exhibition like also projects.

FK: I think when you talked about the exhibition that you had in the Coliseum.

MF: That was very important.

FK: That was an important exhibition?

MF: Three million people going through it. This is crazy. This is the scale. You have the Coliseum, you have people who want to see the Coliseum and you have people who want to see the exhibition. Sure.

FK: How important is it, the context then for the exhibition. I mean the Coliseum is

MF: A very important, very important. It is an event. The City has come back with a ludic concept of the city. We have to see the city not like crazy disaster and fear, we have to see the city like a ludic place. New ludic place. We have to come back to the ludic.

FK: Why would you say that?

MF: Why? Because what we can do with the city? It is not a place to work. It is a place for funny.

FK: To enjoy.

MF: Why can we not live all this way? Why do we need a shopping centre, a mall? Now shopping centres become bigger and bigger, bigger than a city. Why not come back in the city?

FK: But does that not mean that we exclude the places of production from the city?

MF: There is no more production. In Europe there is no more production.

FK: In Europe no, but when we look at it on a global scale then there is of course still production going on.

MF: I think we live in a culture, we can have, I think the machine, the robot can do everything. We don't believe now, because we don't use, we use oil, because we also don't want to make research about other system of energy. Because oil was the reason one, one, I think the American system is oil. And we are completely under the American system.

FK: Would you do a Biennale again?

MF: Never more.

FK: Why.

MF: No, but you can do once in your life. You do it twice and it can be the same one. And this is not interesting. You can do one project each time. You cannot do two projects.

Interview with Stuart MacDonald

Conducted on the phone, 30.07.2005, Full Transcript

[First few minutes of interview lost/not recorded]

SMD: But I also recognize there is another category, which I think is a new category, like the Herzog & De Meuron exhibition which is currently at the Tate Modern. I mean, there are other practices like them. But they have exhibitions in their philosophy and their process, if you like, or they use exhibitions to test out new ideas which are going to add to the development of their practice. I think that this is a very interesting trend to do that. I think that exhibitions like Herzog & De Meurons, which is still on, are really interesting in that sense because it is an example of crossing over boundaries. This is very professional in one sense, because it is about the praxis of an architectural studio. On the other hand the architects (to?) get ideas, and the audience for those ideas is wider than the normal narrow professional audience because you have to involve a wider public in a sense. And that makes you think about how to present their ideas and communicate their ideas, and what kind of interpretation ...

FK: Is that what we could probably call a laboratory exhibition?

SMD: Yes, a laboratory.

FK: Is the laboratory something that you would explore in the Lighthouse as well? Or do you see that already happening in some of the exhibitions you had?

SMD: I think we embodied the idea of the laboratory in the in the 6000 Miles exhibition ... in a sense as we invited people to take part and engage in the process if you like. We are doing that from the standpoint of an institution which has a drive to engage with the public. But what I think is interesting about HdM, that's the kind of new trend if you like, that's the consciousness of audience. And I think the important thing about all this is audience. You know "Why do you make exhibitions?", "well, it's for an audience". And who is that audience.

FK: Do you see it as a difficulty that the Lighthouse has a wide an audience as bridging from children to professionals?

SMD: Well yes. I talked to quite a lot of people about this. Most recently with Jamie ... who writes for the Independent, and he thinks that you can't do an exhibition that satisfies both the needs of the profession or the needs of the wider public. You either do one targeting the profession or one that is targeting the general public.

FK: Is it then a priority in terms of where the funding comes from what kind of exhibition you do or what kind of audience you serve?

SMD: Absolutely, I was going to say. But, I think with the 6000 miles exhibition and with the Fieldtrip exhibition, I think we have succeeded in a kind of exhibition that is on one hand of interest to architects and other professionals, it does offers them a kind of fresh way of looking at the environment and on the other hand it has sufficiently interesting content that is of interest to the wider public.

FK: Yes, I totally agree there. I think particular with those two it was very interesting how the research aspect, the whole process of actually coming up with these exhibitions, how that developed.

SMD: I think we cut new ground with those two exhibitions. I know we are not very unique in that. There are other people around the world that who, generally speaking, are trying to produce exhibitions that engage with a wider public. And they are (testing?) different kind of methods and so on. This is (nonetheless?) much more difficult than let's say Fine Art exhibitions. And I think that design falls between the two camps if you like. Because it is difficult to explain it but on the other hand it is more day-to-day consumable if you like by the general public.

And another point that you mentioned, Florian, is about money or funding, which is of course an important part of this kind of ecology (?) of exhibitions. Because, obviously, 6000 Miles is funded by the Scottish Executive as part of their architectural, cultural policy. So therefore it prefigures the kind of audience if you like. So even if we didn't want to respond to this audience we would have to. But of course we want to work with the audience. But on the other hand we have done exhibitions that were funded by the (Glasgow) City Council and they might have a different character, because they have a different aim if you like.

FK: In terms of audience, do you expect something to come back to you? Is there something that you, - I mean, usually one puts something out there in the exhibition context, in some space, and yes you might have some sort of feedback sheets. But is there something that you are interested, or more interested, in getting some kind of interaction between the audience and the exhibition and the Lighthouse as institutions? You do a lot of these workshops, but what is the role you see here for the audience. I think, in your 6000 miles seminar talk, you called the audience actors in the exhibition.

SMD: Yes. There are stats don't see the exhibition just isolation. The involvement in the process developing the exhibition, but also once the exhibition is out there. To engage people and to engage with people in all different sorts of ways. We do want their reaction, we want to know what they learned or enjoyed from the exhibition. So there are the usual evaluation forms and response sheets and things like that, but also the exhibitions are accompanied by a lecture or workshop programme. Like the 6000 Miles we had interesting workshop programme with kids and so on that has been very interesting. Things like Common Place, for example, those go on tours that takes in a wider audience, if you like. Common Place, when it was in Aberdeen, in a place called the Art Space, they used it as a platform to talk about the city. And it is now mentioned that they kind of developed a programme from that exhibition as catalyst for the broadening of their programme for engaging different audiences, which I think is quite interesting.

FK: Does that mean that, to a certain extent, the authorship of the exhibition goes from the Lighthouse to somebody else and they do something else with it?

SMD: I suppose so, yes. You know when they use... 6000 Miles was now just in St. Andrews, in the ... Centre, their ... museum ... as well. Which I think it interesting, that different venues can pick up the exhibition and modify it. I mean not physically modify is but modify it intellectually. And use it in another, an open (?) context. Which I think is interesting.

FK: Is that something that you've done the other way round as well. I mean, probably not taking something from St. Andrews, but taking something from other exhibition centre in Europe and modify them and take authorship of them.

SMD: Yes, I am trying to think of an example, but yes, we have done that.

FK: Maybe we can come back to the relation with other exhibitions types. You talked about exhibiting art, exhibiting designs. How do you see influences of exhibiting art, exhibiting design, but also exhibiting science or history in other museums, in other

institutions? How is their influence on the architecture exhibition in general? And maybe particularly in the Lighthouse?

SMD: Well I think that this is very important. Because before we started it has always been our ambition/decision to avoid exhibitions that ... drawing on the wall kind of thing. Although of course, sometimes you just have to do that. And we also had the inclination to borrow methodologies from fine art exhibitions like including video installations. And that is now common repertoire in architectural exhibitions. You know, Foreign Office, at the Venice Biennale, the one before last, there was a time when architectural exhibitions ... would use that kind of format. But we did that. And also using the format of using the video witness, video anthropology. And as an extension of the exhibition, giving the people camcorders and recording their experience with and views on the designs.

FK: That was also an element in Anatomy of the House, wasn't it?

SMD: Yes, Anatomy of the House had some sort of video diaries with the inhabitants of the houses, counter-positioning them with the views of the architects which created an interesting juxtaposition.

FK: If we stick with 6000 miles ...

SMD: Also, because our curators like Lucy also curates here own (art) exhibitions so she crosses those two worlds.

FK: Ah, I didn't know that.

SMD: Visual Arts and contemporary architectural design, and I think that that is really useful.

FK: Definitely. With the 6000 Miles, if we compare, because it was the same material in a way but displayed completely differently in Rotterdam and in the Lighthouse. Obviously one issue was the space constraint, but how would you compare the two? Do they work in the same way? Do they work very differently?

SMD: No, but I think that is an interesting point, the smaller versions of a bigger exhibition, which we've now done several times. To design from the main exhibition a smaller travelling version. And in this particular context. So yes, it is a smaller version of a bigger exhibition but without the enhancement of programme or workshops or things like that. I suppose it has a more sort of promotional kind of purpose than anything else. So it's either promoting the architects or it is promoting the Lighthouse or promoting Scottish culture in a wider in a wider sense if you like.

FK: So in way, a similar material becomes something else in a different environment or context?

SMD: Yes, it has a further usage or new life if you like.

FK: Okay. Very broad or general again, in terms of researching architectural exhibitions what would be the crucial issues for you?

SMD: If I would be researching them?

FK: Yes.

SMD: If would be doing what you are doing? [chuckles] If I just had the time. I mean, I am very interested in this whole area. What I'd like to do is research the history of the

notion of the architectural exhibition. The kind of classical format, how architecture was used for political purposes and so on. And I think probably Deyan, I don't know if you'd read it yet, but Deyan Sudjic's "The EdificeComplex" ...

FK: I haven't read it yet, no.

SMD: It is not really about architectural exhibitions but about how architecture has been used by people in power. Which of course is a kind of precursor (?) of the architectural exhibition, if you like. Which is, architecture to display or interpret something. And then how, in the 19th century, you know, the V&A was set up with a so-called architectural gallery, which I think is still called that, with casks ... in the 19th century Europe to educate artisans and designers for industry. You know, they used classical models and so on and the architecture on display became much more widespread. You had this whole industry of plaster cask making which is quite interesting. And then developing that through into the turn of (?) the century, the expositions, of, for social purposes or political reasons, where countries, or cities or regions display architecture for primarily political ... reasons, a new vision for a city, or a ... I think it is interesting, I don't know if you came across here, Elisabeth Lebas, she is at Middlesex University, she used to teach at the AA, and her research is about how architecture has been promoted to the general public, of the built environment, it's wider than architecture, planning and so on, and it's interesting, she first got interested in this through the CCA in Montreal, she is French Canadian, and discovered Annan's photographs. And she recognized that Glasgow was one of the first European cities to use the new media as a means of talking and communicating about the built environment. ... programmes then led to regulatory change and planning and so on. And she then became interested in Glasgow, she discovered the lineage of Glasgow from Annan right through the early twentieth century using the media of photography, initially, and then film, even during and in-between the wars, you know, when ... with a big social change and housing acts and so on. And using film to communicate with that wide audience to [trigger] the transformation.

FK: I suppose also all these films from Grierson as well.

SMD: And there is a line that she followed. From Annan through early twentieth century films, films about Modernity, 'how do we want to live?', that's the way she approached it.

FK: That's very helpful, I have to trace her.

SMD: Yes, I think that that line of thought is very interesting. I think it is about this idea that the architectural exhibition, communication, you know, audience. It's a topic that is very interesting to pick up on in this kind of research. That would be one of the things that I would be looking at. Alternative modes of communicating architecture to a wide audience. Which hasn't really been researched. I think she's probably, I mean she said it herself; she's probably the only person around who has been doing that.

FK: Yes there is so little been done about it, it is amazing.

SMD: It's also, she had to struggle to London because, she ... architectural research and architectural schools they are not interested in that kind of thing. That's my kind of conspiracy theory about architectural exhibitions, you know, it is a very young and immature field, very few people have been researching this topic.

FK: Do you think that this is only because a lack of funding?

SMD: I think, it is just a cultural thing. It's this immaturity of the field.

FK: Saying that, it is more than hundred years old. Some other disciplines are not that old and they researched.

SMD: Yes, that is very interesting to look at that. And then, what you said, the different categories of exhibitions, which I really hadn't thought about in any degree of depth, I was talking to ... at the Venice Biennale, she is the commissioner of the British Pavilion, and just talking about different architecture exhibitions here at the Biennale, like the Peter Cook, I don't know if you saw the Biennale last year.

FK: No, I didn't have the chance. I only saw the catalogue unfortunately.

SMD: You know the curatorship of that, seven practices, you could say, very traditional, you see models and drawings and, you know, it is an interesting juxtaposition of architects, but there is nothing new to that. Whether on the other hand, the one that won the prize, the Belgium Pavilion with Kinshasa, it was about colonialism and it was much more wider, I mean it wasn't about building as such, it was about building an empire. Colonialism and its influence on African culture and society and so on. Which is quite interesting. You know, contrasting that with the British Pavilion and on the other hand with the German Pavilion, which I thought was the most interesting.

FK: The *Deutschlandschaft*, presenting all these small practices.

SMD: ... along a photographic narrative looking at the changes in the German urban periphery, which was very interesting and very localized. ... I think all these different typologies of exhibitions are really quite interesting.

FK: To stick with the Biennale, do you think that these Biennales have still their value and reason or have they become just a too big supermarket and almost unwatchable because of their plenty of exhibits?

SMD: Well yes I think, ... Florian, they are almost indigestible, they are far too big. It's almost like you are going to a supermarket, you head for the delicatessen as supposed to the whatever. You can't take it all in. But I think that the Venice Biennale still retains its kind of validity. The sheer amount of people who go there. It's quite awesome to watch all these people queuing, I would say it is primarily professional audience but it is a world professional audience. And think it is sufficiently, you know, it is like a supermarket, there is so much in it. You're bound to find something that you find interesting, even if you only explore only 20% of the actual exhibits. But I think all the other ones, like Rotterdam, I am not sure about. Even that we took part twice. I don't know what they are really trying to do really.

FK: No, particularly with the last one, I didn't quite see that.

SMD: You know, if it is trying to get the same kind of audience like the Venice Biennale then it is failing to do that. And if it is trying to invite the local Dutch audience to more interest them in architecture, I am not convinced that they are doing that either. And I think Sao Paolo and this new one in Parma ... you know they are almost ... the world now (?). And I just wonder what their impact.

FK: And Istanbul I think is going to have one next year as well.

SMD: Yes

FK: Probably a last question. How would you consider the influence?

SMD: I am sorry Florian, but there is another parallel line of inquiry or type, which is probably the housing fair or the expo. And you could ask the same question with their purpose of that in these days. If you look at the last Hannover fair, which was regarded as a failure. I think probably the days of the expo, you know the big kind of building expos, are probably doomed as well. I imagine that with that with contemporary communication tools you can find out all sorts of things ... nothing to going to Hannover or Tokyo.

FK: Or even if you go to various places quite cheaply and see things there directly. That is also possible, isn't it?

SMD: Yes, you can make your own tour.

FK: Maybe a last one question. The influence that the Lighthouse had on the, let's say, the architectural culture in Glasgow or in Scotland in particular. How would rate that? How would you describe it? Did it have an impact on?

SMD: Yes, I think it had an impact. You could measure that in several ways. By numbers of visitors to the Lighthouse, maintaining or increasing a particular level or target. But what we are more interested now is looking beyond that, to see how you create values, like our wider values. And if you(?) covered that in research, as the Scottish Executive have done, that wasn't directly with the Lighthouse, I suspect the impact of policy, as a kind of collateral thing within that research, through the household survey, the Lighthouse has come up several times as, you know, a key point in people's awareness. They might not have actually been aware of the architecture policy but they have been aware of the Lighthouse and what it does. Which I think is quite encouraging. ...

FK: Do you get the same impact with those people who actually produce architecture? Namely, developers, politicians and investors.

SMD: I send you the most recent report [of the Scottish Executive], that is interesting in that it is called 'Public awareness of the built environment'; that was a survey of the building professions' attitude to the architecture policy. And it says, interestingly, the planners were much more aware of the policy than architects. Which was an interesting finding. ... kind of professionally based but it is quite interesting how the professional planners and developers perceived the policy. Although in that context, the Lighthouse was seen as a kind of centre of excellence and key of delivery of the policy.

FK: Excellent. Well, that covered a lot of ground, Stuart, and I think that most of my questions that I had here, I mean we digressed a little bit from some but I don't think that this is a problem.

SMD: No, that's what these open-ended interviews are about.

FK: Thanks very much for your time and talking to me and I guess if I have one or two specific questions I can come back to you.

SMD: Absolutely.

Interview with Joep van Lieshout

Conducted on the phone, 29.07.2005, Full Transcript

FK: Do you consider exhibitions as a continuation of your artistic praxis and if yes what are the interactions between the work that you do in the exhibitions and the work that you do outside the exhibition context

JVL: I think that exhibitions are a ... part of the art praxis, at least for me. So, when I design an artwork, when I produce an art work then I have always in the back of my mind how it will fit in an exhibition space or how it will be perceived by the public. And also when I install about an exhibition I think about this kind of things. Because this is the final thing that people see and that they will react and reflect on.

FK: Do you distinguish between group exhibitions, where you show only a specific piece and those like the current exhibition at the MAK [Museum for Applied Arts in Vienna] where you have a solo show?

JVL: Most of the time we do solo shows, not so many group shows. And if we do a group show then I prefer to do an installation, one or a couple of spaces in which we make an installation or a group of sculptures that are consistent with each other. Of course sometimes people include one or a couple of works in an exhibition but then the exhibitions are made by curators.

FK: What is your relation to exhibition curators in these instances?

JVL: Well, we like them, we need them, but we are also self-sufficient. So normally we organize the whole thing, like the transport, the packing, the installation. On a practical level, you don't have to collaborate that much. Although I am willing to change that because it is costing me a lot of work to do all these exhibitions.

FK: Do you have ever acted as a curator, not only for your own work, but for other works as well?

JVL: If I did?

FK: Yes, have you done that as well?

JVL: ... show at the Beujmans Museum, I accepted that a couple of my works and make an exhibition of arts works of collection the Beujmans Museum, which ranged from medieval sculptor and painting towards contemporary art works. So it is very interesting. The exhibition is called 'Triumph'.

FK: And 'Triumph' happened already or is it going to happen?

JVL: No it happened already. It happened a couple of weeks ago. I don't know, but maybe there is an information about it on their web site.

FK: I will have a look for it. Do you work with the term 'categories' for your exhibitions. I mean, exhibitions can vary considerably in their means and in their ends; they can take all different form of sizes or be in all different places. Or target different audiences. Do you define different types or categories of exhibitions that you do?

JVL: Sorry, you should explain that again. Like I said that this is a group show and this is a single show.

FK: Yes, but apart from that. Or more specifically, I personally work or research on the laboratory exhibition, where an exhibition is used specifically to develop certain themes or topics, specifically within architecture. Do you work with the term laboratory in connection with your exhibitions?

JVL: (chuckles) I don't know what you are talking about.

FK: No? Sorry.

JVL: No, we make art and then we make exhibitions.

FK: So it is a clear-cut process, you first make the work and then it is exhibited?

JVL: Yes, we, very rarely make, we do make site-specific works but they are always conceived in the studio and transported, pre-fabricated and transported to the museum. So you rarely will find me working for one month working in some kind of museum space.

FK: Do you think that the work changes once you take it out of your workshop, your studio and put it into an exhibition space?

JVL: Oh yes, definitely it changes, yes. And also between different exhibition spaces. For example the exhibition you talked about, the Vienna art show in the MAK, before that, part of it where in the Sprengel Museum in Hannover, it was a completely different space that had daylight. It was more dramatic lighting than we had at the MAK. So it's a different impression you get from the exhibition.

FK: How, specifically with the MAK exhibition, I mean, there you could, with the *Disciplinator* you could walk into the object, or into the cage so to speak. But how far do you envisage the interaction of the audience with your pieces of art?

JVL: Well, as long as they don't damage it, they can be allowed to go pretty far.

FK: Is this an integral part of the work, that the audience interacts?

JVL: No, I mean it is more a personal preference I think. When I see something that I like, I would like to see it from up close, from above, from under, to stand in between. I just think you can see it better. So, it's not that I want the people to interact with it. It is more to give them the possibility to see it from every angle. But when they start fooling around with it I don't like it.

FK: Sure. In terms of other exhibitions, from other disciplines, let's say architecture exhibitions, or exhibitions of science, do they have any influence on the way how you exhibit your work?

JVL: Yes, say that again.

FK: Exhibitions from other contexts, like architecture or exhibiting science or technical objects, do these kind of other exhibition practices from other disciplines have any influence on your own exhibition work?

JVL: No I don't think so.

FK: Does it come purely from the art context or from your own work?

JVL: Well I think even also for my own orientation I don't look a lot to other things that happen within art or outside art. I try very much to, I see making art as something

that comes from intuition and you know, I that I don't do everything is art (?). That way I keep my mind more free. So basically I like to re-invent the wheel.

FK: Okay, can I ask a last question? Do you, considering the research about architectural exhibition, I don't know how often you see architecture exhibitions, but is there anything that you would consider specifically interesting in researching in that field.

JVL: No, I mean, as I told you, (pauses) I have been seeing a lot of buildings. I like to see buildings. I would be perfectly alright to drive a whole day in my car to see one building. And maybe if there would be architecture in an exhibition somewhere, and I am around, maybe I will see it. So when I see it, it is not my main interest, I prefer the real thing, the real architecture, not the exhibition about it. To me it seems that architectural exhibitions are a little bit boring.

FK: In that respect, the drawings that you did for several of your pieces, whether that was the *Disciplinator* or the *Technocrat*, when these drawings are exhibited on their own, do you see them as pieces within themselves, as art pieces or are they illustrations of something else to come?

JVL: Oh no, I see them as art works.

FK: Okay, so in that respect they are different from architectural drawings?

JVL: Yes.

FK: Well, thank you, that covers the questions that I had here. Thank you very much for your time Joep. And thanks for talking to me.

JVL: My pleasure.

Interview with Otto Steidle

Conducted in the Academy of Fine Arts Munich, DATE, Interview conducted in German, here English subtitles of video 'The alternative of the city - is the city' shown at the 7th Architecture Biennale in Venice in conjunction with Otto Steidle's installation 'The Nomad's Tower'.

FK: 'The alternative of the city - is the city'. What kind of city are we talking about here? Or to put it this way, if you think about a city right now, which city are you thinking about?

OS: Actually, always Munich. And at the same time there are many cities that come to my mind, those which are probably the archetypes of the city, Italian cities, first Rome, which rubs off onto Florence and then all those cities to which these influenced cities have rubbed off onto again. More the Italian cities than Paris or London. That might have to do with my biography.

FK: You once stated that cultural knowledge is rooted within the urban context and that it plays a vital part for you there. In the rural life it is rather the experience that becomes important. Could you just explain this once again?

OS: Let me start with the experience. The experience that I mean here is the one, which Peter Handke describes in *"Über den Dörfern"* by saying: 'Don't ask the people, they no longer can teach you anything' What he means is that you don't get any information from the people. Or to put it the other way, you do get a lot of information about the urban realm, but you don't get experience as in the sense of conclusions that you draw yourself. This has not to be a total nature experience, but it can also be the many little things. Conclusions that are drawn in relation to what happens around you, they are much more intense in the rural environment.

It is me and the thing and it is me and the environment, or even me and the cosmos. It's stronger for me here, - that may not be the same for everyone. The city is rather me and the others, me and the information from other people, it is me in an exchange with other people. That is the essence of the city in contrast to the essence of the natural environment.

I don't want to qualify this for myself. They are just two different things. And I see the one thing much clearer when I am in or come from the other thing I would neither want to be exclusively 'country' nor 'city'. Just as much as, - when I was teaching in Berlin for some years -, I didn't quite want to be a Berliner but not a Münchener either. I've seen Berlin in contrast to Munich and coming back from Berlin Munich was different.

FK: With that you are describing already something, which I see in most of your work. Within your architecture you are working a lot with the context, with the historical traces that are written into a place. But at the same time you are superimposing something from a quite different sphere onto this very local context. It may be some architectural elements, a facade theme or a building typology that you have taken with you from somewhere else and that you transfer into an architecture that is therefore no longer a specifically Munich or Berlin architecture but something in between, possibly both. Is this characterised correctly?

OS: Yes, - assuming I would be a photographer -, then it might be possible, when you are very young and unbiased to use a certain aesthetic that you transfer more or less sensitively onto a specific situation. On the other hand, if you have absorbed thousands of images in relation to all those images that you are seeing right then, then

all of the photographs you are taking have something to do with those you have seen by Cartier-Bressons or anyone else.

In my work it is important to me to bring my own experience into the work, not just to mirror myself as an individual but to find myself within the work, or if you like, to reflect. And in that way I get this proportion of an individual manifestation within the general by taking into account what I am carrying with me. In my rucksack I have all images and all the architecture that I have once seen or experimented with and which I then reflect on what is there, as the mentality of the place.

Hamburg for instance is a city that could be declined up and down, and it actually has been declined to the bottom. You may refine this a bit further or you might superimpose it with something that lies in the Zeitgeist. To some extent this is present in my work as well, it interests me as well. But then I am even more intrigued by what I would call my own entire history.

FK: Today we are increasingly facing places or architectural tasks confronting places, which do not carry such a history with them. Places in the periphery, somewhere in the no man's land. And yet you are reacting there in a very similar way to your reaction within a city. You are not using the periphery as a theme. I am not talking of the adjustment of the building regarding for instance the scale. But it is very obvious that you are still working with urban elements such as streets and alleys, with the enclosed block, with elements that relate to each other and to the street. This seems to me a very conscious decision to carry on the city into the periphery. Could you explain why you are not interested in transferring the theme 'periphery' into your architecture?

OS: First of all I think that all settlements, - and I am talking here not of those settlements that are within the countryside and actually do not interest me very much, - that all these settlements, even when they are in a rather peripheral situation are by nature urban settlements. In this respect there is always somehow a space, which is in a way a public space that everybody is using. And then there are private parts - no matter if they have gardens or roof terraces - that is if they are rather in the suburban or in the city centre. I don't see a contradiction to continue the city where it hasn't been before anyway but where it moves to or re-moves to.

An old abattoir becomes a new city quarter, or an industrial site or former railways, I see them as expansions of the city. And therefore I would refer myself primarily to the repertoire of the city, to the relation of the typological elements of the urban fabric and the house. Hence the figurative aspect is more neutral.

Just let me take the *Wienerberg* Housing in Vienna as an example. It seems to be a rather specific situation where the typology of the inner courtyards similar to those that exist in Vienna's city centre appears here within the *Wienerberg* Housing. I have then built the same type of building in very different places, - in Mainz, in Munich and in Innsbruck. Initially it has something to do with a type that seemed to be right in Vienna. But at the same time variations of this type have always existed in historic architecture. For Mainz I am not entirely sure, but it exists in Munich, it exists in Innsbruck and in that respect it is the invention of a typology that once has been invented for a specific place but which detaches itself from the context of that very place. It has been this sentiment of the '*Pawlatschen*' courtyards in Vienna and Budapest that made me create this typology that then appeared to be strong enough in a suburban situation as well. It created at the same time something like a new beginning and an urban continuity. To then transfer this type somewhere else seems possible to me.

I am not cultivating the placeless 'box', - I am thinking here about Rem Koolhaas -, I do take a distinctively different position. And yet there might be some building types like

for instance the suburban shopping mall, - which wouldn't grip me anyhow -, where it wouldn't make sense any more to pretend an urban arcade. It just wouldn't interest me. Neither the shopping centre nor the 'urban culture', which would be a mere fake rendered onto the world of shopping. This is where the city degenerates to its imagery cliché.

However if one works with the typologies of a common structure, a public structure and its private relations then I believe that those are principles, which are valid as much for the inner city as for the suburban.

FK: Referring to the continuity of the past, do you see this continuity of the city as well for the future? Or to put it this way, how do you envisage the future of our cities and in relation to that our reaction as architects and urban designers?

OS: Well, - I have never understood my role in such a way that I tried to make out a common trend and to work with it. And I do not mean that in a puritanical way, I wouldn't even be against a qualified opportunism, - it just doesn't suit me. On the other hand there is much speaking on behalf of the fact that the conditions for the city are severely changing. One tendency would be the gradual urbanisation of the agricultural area and urban areas which are becoming increasingly provincial. But I would vigorously fight for the difference of both. It is the country that is nurtured by its continuous proximity to nature and it is the city which exists only because of an urban culture and a society that shares out of interest all resources. Because I plead for this difference I don't have any other choice than to design the way I do and to put this on offer.

Now you might say that this is rather a bourgeois confirmation, which is existent in my work. And I would argue that we are not in the times of El Lissitzky where one has tried to dissolve the street because one no longer wanted the street as a bourgeois element. My work confirms the street and it confirms the house as well. But my hope would be that this reference to the city is not just representing the petit bourgeois conformism. It rather should be the representative of a social structure, which simply has democracy as the background for this very society.

In that sense it is within a tradition that I once saw less favourable. By using certain architectural associations which were rather dissolving the relation to the street and geared towards producing machines for the living I tried to detach from this tradition. Somehow this is still on my mind but certainly not as much anymore.

FK: So basically one could almost speak of a democratic architecture, which of course is not using those elements which are generally associated with that funny term 'democratic architecture'. But in the way you are describing it this might be a new definition of this term.

OS: Maybe. Of course architecture can never be democratic, as much as it probably can't be undemocratic either. But with architecture and in the end with urban planning as well we are describing our idea of the world. And in that respect I prefer a world that is representing this structure of democracy. I would prefer it to an ever so progressive world, which would grant the individual no more than the singular object through which he is in a connection to an indefinite structure.

APPENDIX B - EXHIBITIONS

Appendix B presents two exhibitions that have been curated by the author during the course of the PhD research and which provided the opportunity to apply or test already some of the knowledge and findings gained through this research in the author's curatorial praxis.

These exhibitions are:

1. *Glasgow Is Made By Us*,
in conjunction with the Six Cities Design Festival, The Lighthouse, Glasgow and
Public Realm of Glasgow
May / June 2007
2. *SHIFTS – Projections into the Future of the Central Belt*,
The Lighthouse, Glasgow, plus various locations throughout Scotland
August – October 2007

The documents presented in this Appendix comprise of catalogue and exhibition texts written by the author as well as images of the exhibitions and installations.

Glasgow Is Made By Us

Exhibition in conjunction with the Scottish *Six Cities Design Festival*

Exhibition at The Lighthouse, Glasgow; Installations in the inner city of Glasgow

Process: January – May 2007; Exhibition: May / June 2007

Exhibition and Project Curator:	Florian Kossak
Project Coordinator:	Roland Gulliver
Exhibition Designer	Reiner Novak, Florian Kossak
Involved Architecture/Design Teams:	After The News Do Architects Erz Ltd. NORD
Others involved:	over 70 readers of the Evening Times

Documents presented:

Document A: Brief for preparatory workshop session 15 Feb 07
Document B: *Glasgow Is Made By Us* – Project description in the *GIMBU* – catalogue
Document C: *The Exhibition* – Exhibition description in the *GIMBU* - catalogue
Document D: *Glasgow Is Made By Us* -Blog
Document E: *Glasgow is Made By Us – Or, the power of transformative design*, text commissioned by Six Cities Design Festival for the forthcoming publication *'Where We Are: Scotland's Design Landscape 08'*

Images Set A: Exhibition at The Lighthouse

Images Set B: Installations in the City Centre of Glasgow

Glasgow Is Made By Us - Workshop Brief

Project

As part of the Six Cities Design Festival the project 'Glasgow Is Made By Us' addresses specifically issues relating to the public realm and its usage. It is a project that is process driven, inquisitional as well as propositional. It aims to engage both professionals as well as a general public. In fact, its aim is to, if not to dissolve, then at least to transgress the boundaries between the two.

The 'Glasgow Is Made By Us' project is divided into two stages. The first encompasses investigation, consultation and the development of propositions. The second stage is about presenting the process and testing the propositions. It has two parts – an exhibition in the Lighthouse and installations in the public realm. Exhibition as well as the installation are regarded as a testing ground and laboratory in which we explore and test certain issues regarding our perception, reaction to and production of the public realm and its built fabric.

Method

We prefer asking you, the designers, to work on a certain topic, issue, or question rather than asking you to 'solve a problem'. It is also anticipated that, in addressing these topics and issues, we can initiate a more interesting process by giving up the 'professional' categorizations and established approaches of our respective disciplines. Instead of 'architect/architecture', 'landscape architect/landscape architecture', 'product designer/product design', 'graphic designer/graphic design' we want to approach the project in terms of 'enclosure', 'place', 'object', 'message'. To encourage an active yet temporal process we introduce a fifth category that all previous categories should relate to. This category is 'action'.

Topics

The topics or issues below have been raised by readers (not necessarily in this order) in the responses to the Evening Times call. They form the basis of our investigations and should be addressed in your proposals. Please decide on which one or two of them you are going to focus. Each issue or topic should be dealt with both on a macro and a micro level. While the former would take into account a wider social, spatial, economic, political or ecological context, the latter would focus on a specific object and an exemplary urban condition.

Transport / Traffic – reduction of car/bus traffic in city centre; priority for pedestrians; no motorway extensions/de-building of existing ones

Cycling - better cycling provisions, cycle lanes, connection South Side/City Centre

George Square / St Enoch Square - redesign of the squares according to 'European standards'

Public Space - more green spaces; spaces without any commercializing aspects; opening up to the River

River Clyde - better accessibility; no selling out to commercial developers; using the riverbanks, water taxi

Litter / Pollution - cleaner streets, more recycling, more bins, better care; reduction of air pollution caused by traffic (see above)

Built Heritage - saving exciting and valuable building fabric

Back Lanes - using the lanes; bringing activity into them

Public Involvement

The project regards an active involvement of the public in 'making the city' as crucial. A first step has been the Evening Times call for proposals. However, this involvement should go beyond the already established consultation or a participation in an initial design process. It should rather also be concerned with the production and use of the proposed object. One could argue that a bench only becomes a bench when one

actually sits on it - or that a product only becomes complete through its use and the act of its consumption. This ultimately alters the object and gives the user an active role in the production process of the object. The aim is to imaginatively explore ways of facilitating and mediating this public involvement in the production process that forms the public realm. We are keen on making this approach part of the whole project, the exhibition and the installations in particular.

Location

With the project as a whole and the designers' contributions in particular (investigations and propositions), we want to make a spatial and thematic link around St Enoch Square. Firstly, the square was raised as an issue in the Evening Times responses. Secondly, it is usually a place that gets less attention in comparison to the more prestigious George Square. We would like to – if only temporarily – reverse this situation. We can also address here and in the streets nearby (Union Street/Argyle Street), the issues of cycling, traffic/buses/pedestrian, litter/recycling, River Clyde/water-city relation, North-South connection that were raised by the Evening Times readers.

Workshop

For this workshop we would ask the designers to come up with some first reactions to the issues identified by the Evening Times readers and the above outlined methodology. This could already be an initial proposal, a set of questions or the presentation of material and precedents that you find relevant in this context. You are asked to present this in a short, 10 minutes presentation at the start of the workshop (Powerpoint facilities available).

We will then work in smaller groups with invited guests on the raised issues to establish a further direction of work for the whole project. Here we would like to particularly explore experimental methods of 'field research' and public engagement in the production process of the built environment.

Project Dates

Workshop	9am – 1pm, 15 Feb 2007
Deadline for proposals (Exhibition and Intervention)	16 March 2007
Deadline for exhibition content	13 April 2007
Deadline for publication content	20 April 2007
Exhibition Dates	17 May – 27 June 2007
Public Interventions:	
St Enoch Square	24 & 26 May 2007
Argyle Street	31 May & 2 June 2007
George Square	2 June 2007

Glasgow is made by us

The project

This publication documents part of the process that led to the exhibition and city interventions of 'Glasgow is made by us'. As part of the SIX CITIES DESIGN FESTIVAL, 'Glasgow is made by us' addresses specifically issues relating to the public realm and its usage. It is a project that is process driven, inquisitional as well as propositional. It aims to engage both professionals as well as a general public. In fact, its aim is to, if not to dissolve then at least to transgress the boundaries between the two.

As suggested through its title, 'Glasgow is made by us' regards an active involvement of the public in 'making the city' as crucial. It is an involvement that should go beyond a preliminary consultation process. It should rather also be concerned with the production and use of the proposed designs itself. The project's aim is to imaginatively explore ways of facilitating and mediating this public involvement in the production process that forms the public realm and objects within it.

The project 'Glasgow is made by us' is divided into two stages. The first stage encompassed investigation, consultation and the development of propositions. The second stage is about presenting the process and testing the propositions. This second stage had again two parts – a public exhibition at The Lighthouse, and installations in Glasgow's city centre. The exhibition and the installations are regarded as a laboratory in which issues regarding the perception, use and production of the public realm and its built fabric are explored and tested.

The Evening Times call

Starting the whole project was an open call in the Evening Times to its readers to submit proposals on how specific aspects of the public realm in Glasgow could be improved (8 January 2007). The topics or design issues raised by Evening Times readers covered all sorts of aspects from traffic, transport and movement in the city to the form and use of our public spaces and squares in particular; from the relation of the River Clyde and the city centre to street litter and air pollution; from reinvigorating Glasgow's back lanes to the saving of the built heritage. The complete responses form the basis of this publication and can be read along the bottom strip of the pages of this publication.

The responses to this call then formed the working agenda that was given to four Glasgow-based design teams – After the News, DO-Architecture, erz ltd., and NORD. Rather than giving the design teams very specific design brief, asking them to 'solve' a specific problem they were asked to deal with the topics raised by the public, issues, and questions on a macro and a micro level. While the former took into account a wider social, spatial, economic, political or ecological context, the latter focused on a specific object and an exemplary urban condition.

Establishing a working mode

The design process kicked off with a one-day workshop, held at The Lighthouse in February 2007. Together with the four designers, a number of key representatives from Glasgow City Council that are engaged in the planning and managing of the city's public realm, as well as several Evening Times respondents, we developed some initial strategies and a working hypothesis that were addressing issues of pedestrian movement and cycling in the city, the design and use of George Square and St. Enoch Square, and the river edge and its connection to the city centre.

The design teams then decided to continue a collaborative approach rather than further developing individual propositions. It was anticipated that this would initiate a more open design process in which the 'professional' categorisations and established approaches of their respective design disciplines were abandoned. Instead of thinking in categories like 'architect/architecture', 'landscape architect/landscape architecture', 'product designer/product design', 'graphic designer/graphic design' the project was approached in terms of 'enclosure', 'place', 'object', 'message'. To encourage an active yet temporal process the fifth category 'action', relating to all previous categories, was added.

Propositions for Glasgow

As with the city itself, the issues raised by the Evening Times readers are complex and interconnected and relate to many aspects of life from the macro to the micro level in the city. Because of this, the four designers decided that it would not be useful to look at any one issue in isolation but to look at many of the issues together, as parts to a whole, highlighting how at a strategy and policy level things can be redesigned to achieve long term goals and at a ground level how things can be redesigned to have short term impact.

The designers felt it very important that they would not put forward solutions but propositions to allow the debate and public engagement started with the article in the Evening Times to continue, to empower people to take part, and to allow the public to comment and react throughout the project's process.

In that sense the collaborative design process is as important as the design proposal. The project intends to continuously engage with the Glaswegian public.

ripping through some of the most historical nicest building the city had. The North Street section is quite frankly an embarrassment to the city. We have the lovely Mitchell Library overlooking a gaping hole in the ground. The new landmark Elphinstone building will also look over this eyesore.

Surely it is possible to cover the M8 from Charing Cross down to St. Vincent Street. The area could be re-invented. There could be weekend market stalls, entertainment areas, similar to Las Ramblas in Barcelona. You could add green areas, etc. It would create a gathering area at this end of town that is sorely needed.

They can build bridges in no time in war-torn countries so surely they have the technology to cover the gap. It would cost many millions of pound I'm sure.

It would open up the whole area, and the Mitchell Library could have an approach and environment it deserves.

Jim McGuire

More opportunities to recycle rubbish would be one huge improvement I think Glasgow could benefit from. I used to live in Pollokshields and at the end of the street we have bottle banks and paper recycling units

which were fabulous but since I moved I still have the same amount of rubbish but the nearest place to recycle it is 3-4 miles away in the Asda car park. As I do not drive or have a car it makes recycling impossible. I also live in a tenement, as many people in Glasgow do, with limited space for storing bottles etc. I think this would not only improve Glasgow's and Scotland's recycling record but also help with the problem of rubbish around the city. Some areas are a real disgrace. Better walkways and cycle paths leading from the south side to the city centre. When I lived in Shawlands I used to walk to work along Pollokshaws Road and enjoyed it very much

until I got to Eglinton Toll. It then became very unpleasant and a real hassle. The bus pollution is sometimes unbearable and whoever planned the pedestrian crossings was obviously a fan of the car! Either you have to take your life in your hands and risk crossing several very busy roads or cross back and forth from one side of the road to the other. The walk from the south side to the city centre is only about half an hour but many people are put off by how inaccessible and unpleasant it has been made. I love Glasgow and I think these changes can only improve on a fabulous city.

Anna Maria

⁷¹⁸ KOSSAK, Florian (ed). (2007). *Glasgow is made by us*. The Lighthouse and Six Cities Design Festival: Glasgow.

Document C:
Glasgow Is Made By Us – Exhibition description in the *GIMBU* - catalogue

14 *Glasgow is made by us*

The Exhibition

'Glasgow is made by us' is a growing exhibition. The exhibition is deliberately left 'unfinished' at its opening and will be complemented and altered during its entire duration. In this way it can accommodate a participatory engagement of its audience and will document the ongoing process of presenting and debating the propositions by the four designer teams. It will also continue to document the interventions that are staged in Glasgow's city centre after the opening of the exhibition.

The exhibition design consists of a shelf-wall that consists of 160 compartments. Each compartment has the inner dimensions of 400/400/400 mm. The shelf-wall is therefore five compartments high and 32 compartments long. It is made out of 19 mm forestry stewardship council approved birch plywood that is painted with acrylic emulsion. The shelf will be built in 8 units that can be individually disassembled and shall therefore have a life beyond the exhibition.



G



To comment upon propositions for the re-organising of Glasgow's public realm, the exhibition, the interventions or any other issues raised by 'Glasgow is made by us', there's also the blog...

It's an experiment to see whether we can create small feedback loops whilst the project progresses, creating an opportunity for input and feedback

www.glasgowismadebyus.org

'Glasgow is made by us': Exhibition

17 May - 27 June 2007
Level 5, Long Gallery

The Lighthouse - Scotland's Centre for Architecture, Design and the City

11 Mitchell Lane Glasgow G1 3NU

Opening Times
Mon 10.30 am - 5.00pm
Tues 11.00 am - 5.00pm
Wed until Sat 10.30am - 5.00pm
Sunday 12.00 pm - 5.00pm

You are invited to actively contribute to the growing exhibition by using the 'Glasgow is made by YOU' cards provided in the exhibition. Please use these cards to comment upon the proposals presented by 'Glasgow is made by us' or make your own suggestions on how Glasgow's public spaces could be differently designed. Be part of 'Glasgow is made by us' by putting your postcard in the spaces provided in the exhibition. Or, just stamp and post the card and we will place it in the exhibition for you.

Glasgow is made by YOU...



lighting... fairground... less tacky and cheap looking... St. Enoch Square is underused for such a big space. It is also unattractive, trees should be planted and it should feel part of a grand thoroughfare.

In general there should be more emphasis on making the city look greener, it is where the name comes from after all, tree lined streets, grass in the squares, redundant sites turned into green spaces no matter how temporary. Litter... More bins is the obvious answer but emptying them more often is the simple solution, bins that are full to overflowing are a common sight. And have more street cleaners throughout the city working

during the day rather than waiting until the early hours which lets the litter build up. Throughout the city there should be more recycling depots and these should be well publicised so all residents are aware of their local site.

Traffic/Transport. There are far too many buses in the city centre and it causes congestion, especially during the day once the rush hour is over with... Trams should be introduced. This policy has worked successfully well throughout Europe and many English cities.

Cycle lanes should be clearly signed within the city centre as people walk up them at

busy periods and there should be more of a drive to encourage local firms to install showers in their offices which would encourage more people to cycle.

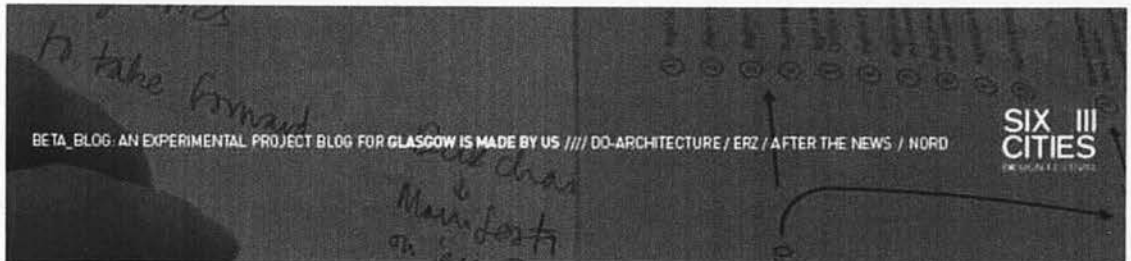
David Brown

How about an arts festival in each park across the city over the summer - each with a different focus. So you could have music in Kelvingrove in June, river festival in July, theatre in Tollcross Park in August, film in Queens Park in September. I'm sure there are other artforms/parks, but it's a start!

Rae Spence

Reintroduce the trams to Glasgow. This is an obvious (if long-term) solution to some of our public transport problems, and will ease the pressure on the railways, which are currently vastly oversubscribed... Upgrade street lighting bulbs from the tired, outdated, much reviled orange sodium lights to compact fluorescent lamps... In a city such as Glasgow where light can fall as early as 2pm in the depths of winter, improving the exterior lighting can have a marked effect on the usage of our exterior spaces... In the city centre the lanes are poorly lit, badly maintained and only used for service vehicles. These are a much overlooked

Glasgow is made by us



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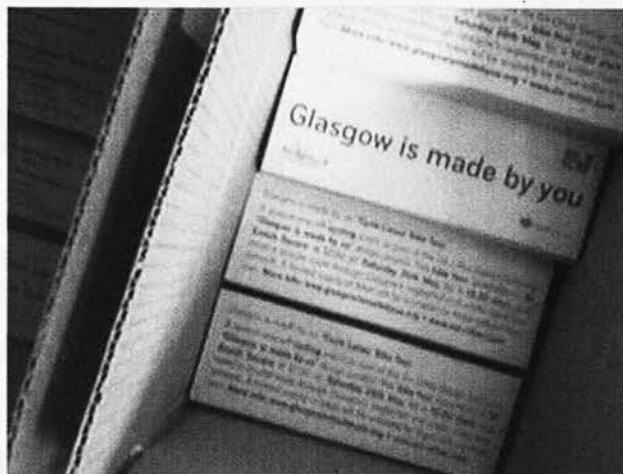
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New Flyers / Critical Mass



New flyers have arrived, advertising the website and the four 'events' which'll be happening in Glasgow this May. If you'd like some to distribute, or know someone who might, email [neil\[at\]off-brand.co.uk](mailto:neil[at]off-brand.co.uk)



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Glasgow is Made By Us – Or, the power of transformative design⁷¹⁹

Imagine a Glasgow full of public spaces that are designed well, free of litter but full of greenery, with sculptures and water fountains. Imagine a Glasgow that preserves spaces devoid of the hegemony of commerce and consummation, with plenty of public amenities and comfortable street furniture. Imagine a Glasgow that connects and opens up to the River Clyde, where everyone can enjoy the riverfront. Imagine a Glasgow that values and safeguards its historic building fabric. Imagine a Glasgow in which the back lanes are vibrant places, used by pedestrians and as cycling routes. Imagine a Glasgow with a considerable reduction of polluting car traffic in the city centre, where cyclists and pedestrians are given priority over cars, where public transport is efficient and free. Imagine a Glasgow that offers hundreds of yellow deck chairs throughout its squares and streets to be used by everyone free of charge.

This is a truly fantastic Glasgow that had collectively been imagined by Glasgow's citizens and its visitors. Fantastic, but all pretty reasonable stuff one would think. And yet, for some reason or other we still don't seem to see this Glasgow to happen. Or are we?

The *Six Cities Design Festival's* aim was to celebrate Scottish design and to 'show how designers are helping Scotland become an even better place to live, work, and play'⁷²⁰. While designers – architects, landscape architects, product designers, graphic designers – certainly have their role to play in this transformation process, the project *Glasgow is Made By Us* tried to emphasize the crucial role the public, that is every citizen, has to play in the design process that produces this transformation. It is an involvement that has to go beyond a preliminary consultation process. It is an involvement that should also be concerned with the production, implementation and finally with the use of the proposed designs itself.

Glasgow is Made By Us' aim was therefore to imaginatively explore ways of facilitating and mediating this public involvement in the production process that forms the public realm and the designed objects within it. It aimed to engage both a general public as well as professionals. In fact, its aim was to, if not to dissolve then at least to transgress the boundaries between the two. In this respect, *Glasgow is Made By Us* was probably as much about the demonstration of a participative design process than about the development of concrete design proposals for Glasgow's public realm.

Glasgow is Made By Us itself was divided into two stages. The first stage encompassed investigation, consultation and the development of propositions. The second stage was about presenting the process and testing the propositions. This second stage had again two parts – a public exhibition at *The Lighthouse* and installations in Glasgow's city centre. The exhibition and the installations were seen as a laboratory in which issues regarding the perception, use and production of the public realm and its built fabric could be explored and tested.

Starting the whole project was an open call in the *Evening Times* to its readers to submit proposals on how specific aspects of the public realm in Glasgow could be improved⁷²¹. The responses to this call then formed the working agenda that was given to four Glasgow-based design teams – After the News, DO-Architecture, erz ltd., and NORD. Rather than giving the design teams a specific design brief, asking them to 'solve' a specific problem they were asked to deal with the topics, issues, and

⁷¹⁹ Text commissioned by Six Cities Design Festival for the forthcoming publication '*Where We Are: Scotland's Design Landscape 08*' (working title)

⁷²⁰ Nick Barley in the introduction to the *Six Cities Festival Guide*, page 4

⁷²¹ *Evening Times*, 8 January 2007

questions raised by the public and to devise methods how these could be further explored with the public. Starting off with a one-day workshop held at The Lighthouse in February 2007, the four designers, a number of key representatives from Glasgow City Council as well as several Evening Times respondents developed a series of initial strategies and a working hypothesis that would address issues of pedestrian movement and cycling in the city, the design and use of Glasgow's George Square and St. Enoch Square, or the river edge and its connection to the city centre.

The design teams then continued their collaborative and cross-disciplinary approach to develop these initial strategies and working hypothesis. In that process, After the News, DO-Architecture, erz ltd and NORD regarded it as paramount that they would not present a finished design proposal but would put forward propositions that were open enough to allow the public involvement to continue, to empower people to take part, to comment and react throughout the project's process.

Car dominance and insufficient public transport, the lack of cycling facilities and badly designed public space, the lack of greenery and the neglect of the River Clyde, to name only a few, were issues first raised by the Evening Times readers and then taken on by *Glasgow is Made By Us*. These issues are of course as complex and divers as the city itself. Design can have a transformative role to play, but good design is also not enough to address many of these issues and problems. Without changes in legislation and planning regulations or without changes of economic priorities good design may only sporadically and temporarily achieve its potential.

Glasgow is Made By Us tried to highlight this both in its process and in its propositions. As a placeholder for a number of design strategies and interventions one hundred bright yellow deck chairs were used on four occasions and in three locations in the public realm of Glasgow. Temporarily they achieved the, almost magical, transformation of a place, hinting at the potential that such a public design could have. A busy shopping street became a place to rest and linger, a draughty square became a place to meet and enjoy a short sunny spell.

These interventions also showed the potential transformative qualities of one simple design object like a deck chair. While the chairs were first set up by *Glasgow is Made By Us* and the Six Cities team, the arrangements were quickly re-appropriated by the public according to their individual needs and preferences. The public was thus able, at least for the short period of this intervention, to engage in the production process of design and the creation of the public realm – a short moment of *Glasgow is Made By Us*.

Images Set A:
Glasgow is made by us – Exhibition



Figure 83: Glasgow is made by us - view of the entire orange shelf installation in the Long Gallery of The Lighthouse.



Figure 84: Glasgow is made by us - detail of the exhibition shelf at the exhibition opening. Initial shelf compartments already filled with project proposals, framed Evening Times-reader suggestions, an urban garden, free catalogue-newspapers, comment cards. Other compartments awaiting filling in the course of the exhibition.



Figure 85: Glasgow is made by us - Close-up of shelf unit.

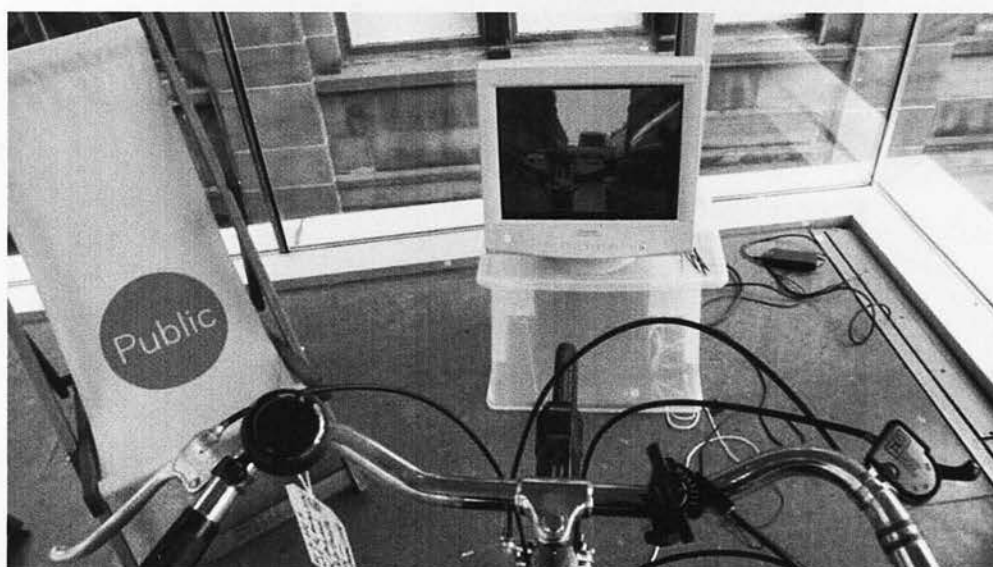


Figure 86: Glasgow is made by us - Pedal-powered video highlighting the problematic issue of cycling in the city centre of Glasgow.

Images Set B:
Glasgow is made by us - Installations in the City Centre of Glasgow



Figure 87: Glasgow is made by us – Installation of 100 sunny yellow deck chairs in Argyll Street.

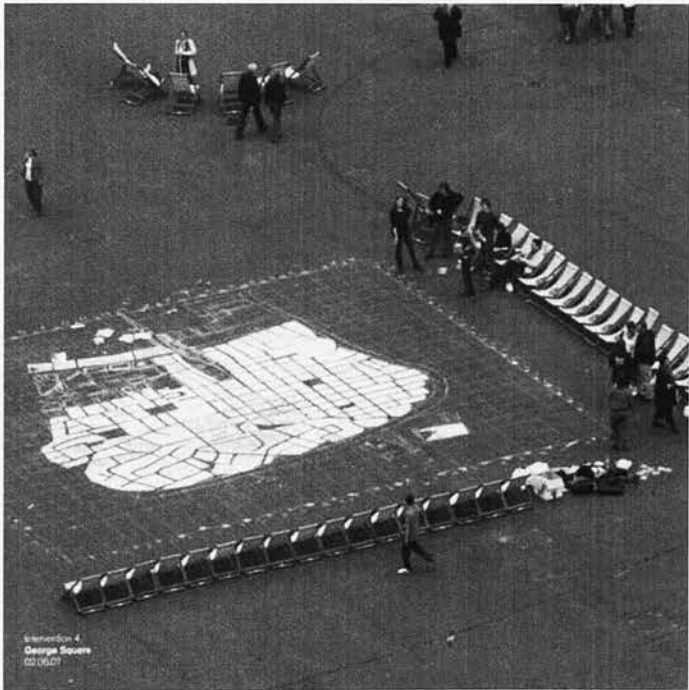


Figure 88: Glasgow is made by us - Installation of 100 public deck chairs on George Square, arranged for the final debate about a temporary map of the Glasgow city centre.

SHIFTS – Projections into the Future of the Central Belt

The Lighthouse, Gallery Four, Glasgow

SHIFTS was the seventh exhibition in the Scottish Executive's ACCESS to Architecture programme. The exhibition also travelled to various locations throughout Scotland

Process: March – August 2007; Exhibition: August – October 2007

Exhibition Curator:	Florian Kossak
Project Manager:	Catriona Duffy
Exhibition Designer	garden
Leading Architecture Teams:	Cadell2 Collective Architecture GRAS Voluntary Design and Built
Others involved	Sam Booth, Prue Chiles, Thomas Cole, John Crawford, Eva Dalman, Colin Howden, Ian Gilzean, Gerry Grams, Jane MacDonald, Lori McElroy, Nikki McVeigh, Riccardo Marini, David Simm, Tom Sneddon, David C. van Zelm von Eldik
Audio Pieces:	Zoë Strachan, Sheila Puri, Pat Kane, Laura Marney, Anne Donovan, Alan Bissett, Dorothy Alexander, Louise Welsh
Film:	Alan Ceserano
Catalogue Editor:	Florian Kossak
Catalogue Design	Nigel Peakes and SKRATCH Design
Documents presented:	
Document A:	SHIFTS – Workshop Brief
Document B:	SHIFTS – Exhibition guide poster
Document C:	SHIFTS Exhibition introduction text [as presented on intro boards]
Document D:	'Preface' in <i>SHIFTS – Projections into the Future of the Central Belt</i>
Images Set A:	Exhibition at The Lighthouse

SHIFT - Workshop⁷²²

The Lighthouse, 18th April – 21st April 2007

The international design workshop, held at the Lighthouse in preparation of the forthcoming exhibition SHIFT, is indented to generate speculative and provocative design proposals that shall become the core exhibits of the exhibition. Workshop and exhibition are both seen as an experimental design laboratory. And although certain parameters are already fixed, it is within the nature of this experimental approach that content and structure are still in progressive development. The outcome of the workshop will therefore partly determine the further direction of the exhibition. The following paragraphs are intended to give you a short introduction about the exhibition concept, its methodology, as well as the role and structure of the workshop as they stand at the moment.

1. Background Information

ACCESS-to Architecture

SHIFT is part of ACCESS-to-Architecture, the National Programme of events and activities that bring the aims of the Scottish Executive's Policy on Architecture for Scotland to a wider audience across Scotland. To do this ACCESS promotes 3 major initiatives:

- cultural connections - reaching the general public through exhibitions
- building connections - reaching young people and learners through education
- digital connections - reaching professionals and the general public through websites

The Exhibition Series

SHIFT is the seventh in a series of annual touring exhibitions opening at The Lighthouse and then touring to venues across Scotland and abroad. The previous exhibitions were Anatomy of the House in 2002, Common-Place in 2003, Fieldtrip in 2004, Landforms in 2004, 6000 Miles in 2005 and Northern City in 2006/7. All toured to several venues across Scotland. 6000 Miles and Landforms were also showcased at the Rotterdam Biennale and the Venice Biennale respectively. The exhibitions lead and inform an associated programme and each exhibition has an attached education programme, catalogue and website. (please see www.scottisharchitecture.com for links to websites).

SHIFT is developed in collaboration with SUST.: The Lighthouse on Sustainability. The exhibition will be held at The Lighthouse from 18th August – 14th October 2007, before travelling to various locations in Scotland and possibly abroad.

2. SHIFT - Exhibition

Exhibition Context

In 1946 Patrick Abercrombie presented his Clyde Valley Regional Plan. It was an unashamedly Modern vision to transform a whole region that was considered as being not appropriate for future standards in housing, production, transport and recreation. Although the Clyde Valley Regional Plan was never executed in its entirety many of

⁷²² During the workshop phase the exhibition title was still SHIFT. It only subsequently became SHIFTS in plural to indicate the multilayered meaning of the term for the exhibition.

Abercrombie's planning proposals, and planning decisions originating from his plan, generated shifts that are still manifest today

These shifts included a shift of a population from the major cities to the New Towns; a shift of production away from the traditional heavy industries; a shift of sites where this production would occur; a shift of attention away from the city towards the country; a shift of culture which was still rooted in the 19th century towards one projecting into the 21st century.

The exhibition and the accompanying workshop intend to pose the question how such a radical projection into the future would have to look like today.

Exhibition Concept

The exhibition SHIFT will focus on the zone that stretches between and connects Scotland's two expanding major cities, Glasgow and Edinburgh. It will examine the historical, contemporary and future shifts that occur in and shape this zone that is commonly referred to as the Central Belt.

The exhibition will deal specifically with the aspects of sustainable movements between the two cities. Movement is understood in this context as ranging from commuting and commercial transportation, to demographics and migration, to settlements and built structures. It will particularly look at the developments along and around the different routes that facilitate these movements, namely the motorways, the rail routes and the waterways.

The exhibition wants to speculate on a transformation of the zone between Glasgow and Edinburgh (and consequently a transformation of these two cities) that incorporates radical changes regarding the existing patterns of movement which would address the burning issues of today to make a sustainable future possible.

Exhibition Methodology

The exhibition will consist of several parts. Central part of the exhibition will be design propositions and scenarios for potential future development with the Central Belt that have been developed in the design workshop.

The propositions will be presented along side research material regarding the contemporary and historical context including comparisons with similar urban developments on an international scale. The exhibition thus works on various layers or aspects of shifts and movements, building temporal and spatial reference points.

The exhibition will be analytical as well as propositional. Its crucial aim is to offer a projection into the future in order to stimulate a discussion about the future development of the zone between Glasgow and Edinburgh. The exhibition intends to facilitate a participative engagement of its audience in order to broaden the discussion beyond the profession.

3. SHIFT - Workshop

The three-day design workshop with national and international architects and key decision makers is intended to deal with aspects of the above mentioned, multi-layered understanding of movement. It is anticipated that the projects developed during the workshop will become the central part of the SHIFT exhibition.

For the workshop we will form four groups of approximately 5-6 designers, each including Scottish and international architects as well as local policy and decision

makers, assisted by a couple of students per group. The four groups will be given different scenarios projecting into the future.

The scenarios are concerned with a radical reinterpretation of existing transport infrastructure and transport patterns; with dramatic changes regarding the demographics of the area; with a transformation of existing agricultural production and its distribution.

The intention of the workshop is for the groups to react to the given scenarios and to speculate through production of design proposals. The work will therefore be happening as much on a macro-level, examining the zone as a whole, as the propositions shall be grounded on a micro-level and deal with specific situations along the routes of movement.

Workshop structure

On Wednesday evening, 18th April we will start with a series of short introductory talks that are intended to provide the context for our work in the following days. Speakers include Ian Gilzean, Chief Architect at the Architecture Policy Unit of the Scottish Executive, Colin Howden, Director of Transform Scotland – the Scottish Campaign for sustainable transport, Lori McElroy, Project Manager of SUST: The Lighthouse on Sustainability, and David van Zelm van Eldik, director of RouteOntwerp. We will also show an extract of the film Cumbernauld 2059 made by GRAS.

On Thursday, 19th April, we start with a field trip that takes us from Glasgow via Cumbernauld to Edinburgh and back using different modes of transport. We will thus see the various routes of movement and get a first hand experience of the area we are dealing with.

On return to the Lighthouse we will start working in groups. It will be down to the individual groups how they want to approach the topic and the given scenarios. They can either work on a macro-level developing for instance a strategy that looks at the whole stretch between the two cities, they can select several generic situations with proto-typical design proposals, or they can deal with one very specific situation that might have caught their eye during the field trip. This will continue through the whole Friday where the initial thoughts are being developed further. Saturday morning should be used to finalise the propositions and prepare presentations that will be held in the afternoon.

Please see also enclosed programme for further details.

Lunch, coffee and refreshment drinks will be provided during the workshop. On the evening of the 18th and 19th SHIFT and the Lighthouse will also provide dinner.

Document B: SHIFTS – Exhibition guide poster

SHIFTS

Projections into the Future of the Central Belt

SHIFTS projects you into the future of Scotland's Central Belt and gives you a view into the year 2057. Imagine the Central Belt not to be a zone to move through but to move to. Imagine a life that is faster and slower at the same time, a life that is healthier, greener and more fun. Imagine SHIFTS have happened.

Four international project teams, led by the Scottish architecture practices Cadell2, Collective Architecture, GRAS and vD&B, have developed scenarios and propositions that speculate about shifts and transformations that could have happened until the year 2057.

The projects have as their main focus the topics of movement and transport in the Central Belt. The proposals they present examine 'movement' and 'transport' in regard to their social, cultural, economic, and political dimensions and the implications these will have for the built environment and its usage.

SHIFTS intends to contribute its part to a necessarily wider debate about possible futures of Scotland's Central Belt with social and environmental sustainability as their core. This exhibition is only a starting point of this discussion and you are invited to contribute to it by leaving comments and suggestions, written or drawn, on the postcards. Please post them into drawer P.

Unlocking the Cabinets

The sequence of 16 cabinets presents the propositions of physical, social, cultural and political shifts for the year 2057 that have been developed by the architecture teams. The top of these cabinets displays a map that combines the four propositions into one overlaid landscape. At four specific locations, the map is interrupted through physical models that embody the key ideas of each proposition. Each proposition is further explained in three cabinets and their drawers.

Short Stories from the Central Belt

Audio recordings of eight short stories by Scottish writers about places and experiences in Scotland's Central Belt.

Zoe Strachan – *Pipe Dreams of a Post-Industrial Area*
Sheila Puri – *Guns of the Gorbals*
Pat Kane – *Human Traffic*
Laura Marney – *DK DRAV*
Anne Donovan – *Heart of Scotland*
Alan Bennett – *The Shutdown*
Louise Walsh – *Too Beautiful for You*
Dorothy Alexander – *Mixed*

"These writers map out and make about the Central Belt... and take a broad view of the nation's imagination. Whether embittered nor utopian, they forget the wounds of history, the noxious of the Central Belt – Kilmaronock, Gorbals, Glasgow, East Kilbride, Fabrik, Hurlford, Edinburgh – not with the cold eye of a gunslinger who's hung up his axe, the homesickness of weary-eyed expatriates culling old photographs, or the resentment of workers struggling to be heard in a country deaf to their cadences, but with the tenderness of storytellers tapping into networks, teasing out nodes, points, and touching nerve endings, sitting and sniffling as they tune into painful pasts and sound out possible futures." *Willy Mailey*

SHIFTS – Comparative Study

Research by Nikki McVeigh and GRAS

Glasgow – Edinburgh
Belfast – Dublin
Liverpool – Manchester
Copenhagen – Malmö

This study which is presented in the exhibition as a text, image, map, matrix compares four examples of the 'cohesive city'. The concept of city cohesion, of two or more neighbouring cities that strategically combine their developments, has become common but its execution varies. The analysis of four European city pairs, including Glasgow-Edinburgh, aims to give clues to the potential Central Belt as a Cohesive City. By examining the socio-economic and historical context, infrastructure and the result this has had on their mutual development a picture emerges.

SHIFTS – The Workshop Film

Film and edited by Alan Cieslano

A film showing moments from the SHIFTS design workshop held from 16–21 April 2017 at The Lighthouse in preparation for the SHIFTS exhibition.

Credits

Exhibition Curator: Florian Kossak
Project Management: Catharina Duffy
ACCESS to Architecture Director (Acting): Pauline Gallacher

Architecture Practices: Cadell2, Collective Architecture, GRAS, voluntary Design & Build

Exhibition Design: garden
Catalogue and Exhibition Graphics: garden

Text: Florian Kossak, Cadell2, Collective Architecture, GRAS, voluntary Design & Build, Nikki McVeigh

Audio Works:

Dorothy Alexander
Alan Bennett
Anne Donovan
Pat Kane
Laura Marney
Sheila Puri
Zoe Strachan
Louise Walsh
With special thanks to Willy Mailey

Film by: Alan Cieslano

Exhibition fabrication and install

Paul Kierulff – Cabinet production
Jin Colour, DCI Print Management Ltd – Graphics Production
Nikki MacLeod – Audio Visual Installation

Exhibition Funded by The Scottish Executive

With thanks to: Sam Eloth, Thomas Cree, Phil Chiles, John Crawford, Ewa Damsan, Gail Architects, Ian Gibson, Garry Grant, Andy Harlandson, Colin Howden, Riccardo Mares, Calum McCallum, Luke McElroy, David Sinn and David C van Zelm van Eskik

ACCESS to Architecture

SHIFTS is a touring exhibition that is part of ACCESS to Architecture, the National Programme of events and activities that bring the aims of the Scottish Executive's Policy on Architecture for Scotland to a wider audience across Scotland.

Cadell2 'The Counter Tectonic'

The Counter Tectonic is inspired by the notion of shifts as both lines or flows that affect us both physically and emotionally. The project assumes a re-orientation of human experience in central Scotland in the first decades of the 21st century that will result from climate change and the emergence of new forms of energy supply. Counter Tectonic looks at the need for urban and inter-urban shifts in the landscape, each set of shifts serving a focused transport infrastructure. It investigates the need for further shifts and interventions to redirect the principal flows of people and goods, to meet the localized needs of a changed society, to form the geography of a new era.

Cabinets K, L and M

K – Fault Line 1: Create your own Shift
L – (First drawer south end) Fault Line 1: Strata underlying Central Scotland
L – (First drawer north end) Fault Line 1: 2057 Shift Proposal
L – (Second drawer south end) Fault Line 2: 2057 Shift Proposal
L – (Second drawer north end) Fault Line 2: Strata underlying Central Scotland
M – Fault Line 2: 2057 Infrastructure Strata Tectonics

Collective Architecture 'The Muckle Canal 2057'

The project takes as its starting point the inevitability of globally rising water levels and the depletion of existing oil reserves. This in turn has required a radical shift in Scotland's global perspective of itself and its political and social attitudes towards natural resources and understanding of industry, travel, and leisure. Building on the ambitions of Scotland's 18th-century canal network, the project provides the creation of a new, generous waterway, which connects the east and west coast of Scotland and is surrounded by dams, forests and non-agricultural land. It thus creates a dense and active artery for Scotland that combines socially controlled decision-making with water and even equates to arts, industry, commerce and nature.

Cabinets C, F and J

C – Shift in Attitude
F – Shift in Circumstances
J – Shift in Perception

GRAS Grove-Raines Architecture Studio 'M8-PARK'

M8-PARK works with a polarity between SLOW and FAST movement that accompanies and facilitates the passing of both happening on a political, transport, physical, and social level until the year 2057.

Centred around a down-graded M8 motorway, now only used as a SLOW recreational route, M8-PARK sees the future of the zone between the two urban centres Glasgow and Edinburgh, as a sustainable park. Set in the context of the growing environmental movement the project intends to strengthen the physical, social and economic links between deprived communities gradually integrating them into a framework that ultimately improves standards of living across the Central Belt.

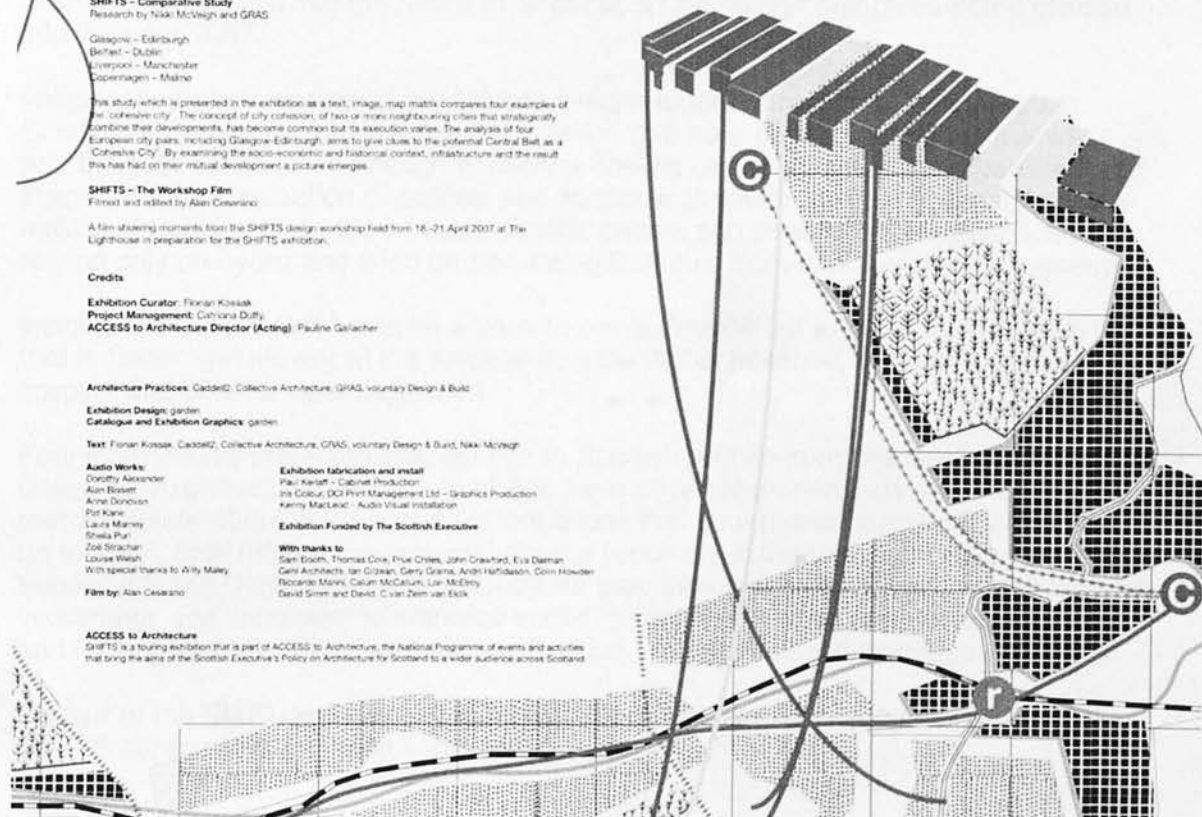
Cabinets D, E, and I

D – M8 Park, Urban
E – M8 Park, Suburban
I – M8 Park, Rural

The project explores the potential of SLOW space left over after planning and proposes a fundamental shift in attitude towards these small corners and strips of land. The project works from small to large scales. It catalogues SLOW and identifies their varying potential for future interventions and development that benefit local inhabitants and communities. By suggesting new social, cultural and commercial uses for these existing yet neglected spaces the project aims to generate positive future effects for the area as a whole.

Cabinets G, H, and O

G – Customised Landscapes
H – Gradual Cultivation
O – Unused Urban Openings



SHIFTS - Projections into the Future of the Central Belt

Scotland has always had periods of adventurous - sometimes ruthless - entrepreneurship, moments of visionary - sometimes misguided - ambition for its future. The late 18th and 19th century in particular saw indisputable achievements regarding the construction of transport infrastructure and the transformation of whole landscapes into zones of industrial production. Human and natural exploitation were the undeniable dark side of this phenomenal shift. In contrast, post-war planning in the 20th century - which also brought us fractured cities and urban sprawl - was fuelled by an unbroken utopian belief in progress for the good of all people.

Many of these diverse impulses and ambitions remained independent moments. They were geographically and politically unconnected events and strategies. They never formed part of a comprehensive understanding of the zone between Scotland's east and west coast, never created a holistic policy for the Central Belt. Today's ecological problems such as climate change, increasing unsustainable transport, ongoing exploitation of green fields, paired with continuing social and economic inequality, demand an end to such dissociated approaches.

SHIFTS intends to contribute its part to a necessarily wider debate about possible futures for Scotland's Central Belt that have social and environmental sustainability as their core. SHIFTS wants to initiate a debate that will have to happen on professional and political, on national and communal level. This exhibition is only the start of this discussion and you are invited to contribute to it.

SHIFTS projects you into the future of Scotland's Central Belt and gives you a glimpse into the year 2057.

Imagine the transformation of the M8 into a major tourist attraction running through Scotland's Central Forest. Imagine the creation of a new canal, connecting the west and the east coast, wide enough to carry a floating opera house or a football stadium. Imagine a decentralisation of political and economical power, producing local decision-making structures that support local identity, culture and production. Imagine Scotland relying only on hydro and wind power, being Europe's main exporter of green energy.

Imagine the Central Belt not to be a zone to *move through* but to *move to*. Imagine a life that is faster and slower at the same time, a life that is healthier, greener and more fun. Imagine that SHIFTS have happened.

Four international project teams, led by the Scottish architecture practices Cadell2, Collective Architecture, GRAS and vD&B, have developed scenarios and propositions that speculate about shifts and transformations that could have happened in the years up to 2057. SHIFTS' and the projects' original focus lay in the topics of movement and transport in the Central Belt. The projects as they have evolved extend the meanings of 'movement' and 'transport' to embrace social, cultural, economic and political aspects and the implications these will have for the built environment and its usage.

Be part of the SHIFTing process by leaving your comments and suggestions on the SHIFTS cards provided in the exhibition.

Preface

Florian Kossak
SHIFTS Curator

SHIFT

verb

1. *shifting one's position: change, alter, vary, modify, revise, reverse, retract, do a U-turn*
2. *the cargo has shifted: move, slide, be displaced*
3. *the wind shifted: veer, alter, change, turn, swing around*

noun

1. *the southward shift of people: Movement, move, transference, transport, transportation, relocation*
2. *a shift in public opinion: change, alteration, adjustment, amendment, variation, modification, revision, reversal, retraction, U-turn*
3. *they worked three shifts: stint, stretch, spell of work*
4. *the night shift went home: workers, crew, gang, team, squad, patrol*

SHIFTS propels you into the future of Scotland's Central Belt and gives you a glimpse into the year 2057.

Imagine the transformation of the M8 into a major tourist attraction running through Scotland's Central Forest.

Imagine the creation of a new canal, connecting the west and the east coast, wide enough to carry a floating opera house or a football stadium.

Imagine a decentralisation of political and economical power, producing local decision-making structures that support local identity, culture and production.

Imagine Scotland relying only on hydro and wind power, being Europe's main export nation of green energy.

Imagine the Central Belt not as a zone to move through but to move to. Imagine a life that is faster and slower at the same time, a life that is healthier, greener and more fun.

Imagine that SHIFTS have happened.

Transformations

Scotland has always had periods of adventurous, in part ruthless, entrepreneurship; moments of visionary, sometimes misguided, ambitions for its future. The late 18th and 19th century in particular saw indisputable achievements regarding the construction of transport infrastructure and the transformation of whole landscapes into zones of industrial production. Human and natural exploitation were the undeniable dark side of this phenomenal shift. In contrast, the postwar planning in the 20th century, which also brought us fractured cities and urban sprawl, was

⁷²³ KOSSAK, Florian (ed) (2007), 'Preface' in *Shifts – Projections into the Future of the Central Belt*. The Lighthouse: Glasgow. pp4-8.

fuelled by an unbroken utopian belief in progress for the good of all people.

Many of these diverse impulses and ambitions remained independent moments. They were geographically and politically unconnected events and strategies. They rarely formed part of a comprehensive understanding of the zone between Scotland's east and west coast; never added up to a holistic policy for the Central Belt. But today's ecological problems such as climate change, increasing and unsustainable transport, over-development of green field sites paired with a continuous social and economic inequality, demand an end to such dissociated approaches.

SHIFTS' ambition is to contribute to a necessary wider debate about possible futures for Scotland's Central Belt, futures that have social and environmental sustainability at their core. SHIFTS aims to instigate a debate that will have to happen on a professional, political, national and communal level. SHIFTS wants to challenge the unproductive rivalry between Scotland's two major cities as well as shift the attention and focus from those centres to the zone in between.

Initiating a process, starting a debate

The Lighthouse commissioned four international project teams, led by the Scottish architecture practices Cadell2, Collective Architecture, GRAS and voluntary Design & Build (vD&B), to make a head start in this debate and to develop scenarios and propositions that speculate about possible futures for the Central Belt. The resulting scenarios are concerned with a radical reinterpretation of the existing transport infrastructure and transport patterns; with dramatic changes regarding the demographics of the area; with a transformation of

existing agricultural production and its distribution; with the introduction of new leisure activities; and the decentralisation and strengthening of local political decision making processes.

SHIFTS' and the projects' original focus lay in the topics of movement and transport in this zone between Glasgow and Edinburgh. The projects, as they have evolved, extend the meaning of 'movement' and 'transport' to embrace social, cultural, economic and political aspects and the implications these will have for the built environment and its usage. In order to liberate the working and thinking process and not get bogged down by the minutiae of the here and now, SHIFTS projects fifty years ahead into the year 2057.

This book is both documentation and part of the SHIFTS project that started with a three-day design workshop held at The Lighthouse in April 2007 and led to the travelling exhibition 'SHIFTS – Projections into the Future of the Central Belt', which opened at The Lighthouse in Glasgow on 17th August 2007. The aim of this book is to be more than an exhibition catalogue and hopes to reach an audience that goes beyond those usually involved in the planning and design processes of our built environment.

The book itself is divided into three distinct but related parts that complement and comment on each other. Part One introduces us to the Central Belt through short stories by eight Scottish writers. Part Two presents the actual propositions, developed by the four project teams, which produce a provocative outlook into the year 2057. A selection of critical essays in Part Three finally puts these proposals into a wider historical and contemporary

context. These three parts are preceded by an introductory essay by Nick Barley, Director of the Lighthouse, in which he makes the case for the necessary debate on a political, cultural and societal level about the future of the Central Belt as it is proposed by SHIFTS.

Short Stories from the Central Belt

Part One, with short stories by eight Scottish writers, Zoë Strachan, Sheila Puri, Pat Kane, Laura Marney, Anne Donovan, Alan Bisset, Louise Welsh, and Dorothy Alexander, provides different and multi-layered observations of the Central Belt from a non-architectural perspective. These short stories are separately introduced by the editor of this part, Willy Maley, and are complemented by six drawings from the Glasgow-based artist Stuart Murray. The order of these stories in the book follows a somewhat meandering, west to east movement, from Glasgow via East Kilbride, Falkirk and Harthill to Edinburgh. In that respect they produce a literary 'map' of the Central Belt which puts the architectural projects, set in the year 2057, into a contemporary and very personal context.

The Propositions

Each project team dealt with the Central Belt on both a macro and a micro level. While the former produced an overall strategy and plan for the whole stretch between Glasgow and Edinburgh, the latter allowed for the specific or exemplary exploration on a very localised level.

It became apparent in the initiating design workshop that the four teams held similar approaches and that their proposals overlapped in many parts. For the exhibition, the four strategies are combined in a common map of the Central Belt in the year 2057. This map

is presented on top of a sequence of sixteen cabinets, each containing further material researched, displayed and produced by the four architectural project teams.

In this book, however, these four teams and their projects are presented separately and consecutively. Readers are invited to make their own links between the projects and to create their own future for the Central Belt out of the presented proposals.

For each project an invited commentator has responded to the presented proposal. These commentators have deliberately been chosen from a non-architectural background and include a geographer, campaigner, academic and researcher.

The Counter Tectonic — Cadell2

Counter Tectonics is inspired by the notion of shifts as fault lines or fissures that effect us both physically and emotionally. The project assumes a re-orientation of human experience in Central Scotland in the first decades of the 21st century that will result from climate change and the emergence of new forms of energy supply.

Counter Tectonics looks at the need for urban and inter-urban shifts in the manmade landscape, each set of shifts serving a localised transport infrastructure. It investigates the need for further shifts and interruptions to redirect the principal flows of people and goods, to meet the localised needs of a changed society and to form the geography of a new era.

The Muckle Canal 2057 — Collective Architecture

The project takes as its starting point the inevitability of globally rising water

levels and the depletion of existing oil reserves: this in turn has required a radical shift in Scotland's global perception of itself and its political and social attitudes towards natural resources and understanding of industry, travel, and leisure.

Building on the ambitions of Scotland's 18th century canal network, the project proposes the creation of a new, generous waterway which connects the east and west coast of Scotland and is surrounded by dams, forests and rich agricultural land. It thus creates a dense and active artery for Scotland that combines locally controlled decision-making with wider and equitable access to arts, industry, commerce and nature.

M8-Park — GRAS

M8-PARK works with a polarity between SLOW and FAST movement that accompanies and facilitates the phasing of shifts happening on a political, physical, social and transport level until the year 2057. Centred around a down-graded M8 motorway, now only used as a SLOW recreational route, M8-PARK sees the future of the zone between the two urban centres of Glasgow and Edinburgh as a sustainable park. Set in the context of the growing environmental movement, the project intends to strengthen the physical, social and economic links between disjointed communities, gradually integrating them into a frame-work that ultimately improves standards of living across the Central Belt.

SLOAP — voluntary Design & Build

The project explores the potential of SLOAP (Space Left Over After Planning) and proposes a fundamental shift in attitude towards these small corners and strips of land. The project works from small to large scales. It catalogues

SLOAP and identifies their varying potential for future interventions and development that benefit local inhabitants and communities.

By suggesting new social, cultural and commercial uses for these existing yet neglected spaces, the project aims to generate positive future effects for the area as a whole. This is made exemplary in the case of Cumbernauld, as well as for Edinburgh Park, a business park at the city boundaries of Scotland's capital.

The Wider Context

The third part of this book features a selection of essays that put the issues dealt with in SHIFTS into a wider historical and contemporary context.

Half a Revolution: The Clyde Plan and its Uncertain Legacy by Miles Glendinning focuses on planning attempts for rebuilding and restructuring Scotland's main cities and the Central Belt. These include the 'Bruce Plan' from 1945, the 'Clyde Valley Regional Plan' by Abercrombie and Matthews from 1949, the 'Forth Plan' by Mears, and the 'New Towns Act' that saw the construction of three New Towns, East Kilbride, Cumbernauld and Livingston, in the Central Belt. Glendinning asks "whether [these] strategies for the regeneration of the old, industrial Clydeside have anything to teach us today, with our concern to find unifying formulae for the ordering of a post-industrial Central Belt as a whole".

Calum MacCallum makes the unequivocal case for the need of *Sustainable Transport in the Central Belt*. He starts off with a description of the increasingly unsustainable transport situation that is, as he argues, fuelled by the "continuing dispersal" of housing,

retail and workplaces. Sustainable transport would therefore be not only transport that uses less fuel and produces less emissions but less transport in the first place which can only be achieved through a densification of existing urban and rural settlements with a functional mix in close proximity.

In the essay *The Future is a Foreign Country*, Prue Chiles argues for the necessity of 'future thinking' in architecture and planning. Chiles writes that "looking at the future is as much about the role of us as professionals as it is about new strategies for the future". In this way future thinking is both about the redefinition of the role of the architect or the planner and about critically examining the potentials and shortcomings of today in order to develop possibilities for tomorrow. This concept is here made exemplary with a reference to Chiles' work with students at the University of Sheffield on the Yorkshire coalfields.

Jonathan Charley's essay *Smash and Grab* is a tour de force through Scotland's history, the rise and decline of capitalism and its effects on Glasgow and the Central Belt. Looking back from the year 2057, a somewhat bewildered narrator tells us of "unimaginable fates and unspeakable acts of barbarity and greed". We are asked "to suspend all previously understood concepts of reason" in order "to fully appreciate the madness of this story". The massive transformations in production and society, the physical shifts of material and people are laid out in front of us and we are implicitly invited to construct our own answers and changes to this dystopian world.

SHIFTS are happening

In addition to these four essays, a series of maps of Scotland and the Central Belt, dating back as far as the early 19th century, exemplify the transformations and SHIFTS that this zone has already undergone. These historical maps all refer to certain shift conditions in fields including transport, production, geography or population. By realising the enormity of all these shifts that have already happened within the Central Belt the inevitability of SHIFTS, on the scale presented here through the proposals for the year 2057, might in fact become, if not self-evident, at least very plausible.

Images Set A:
SHIFTS – Exhibition at The Lighthouse

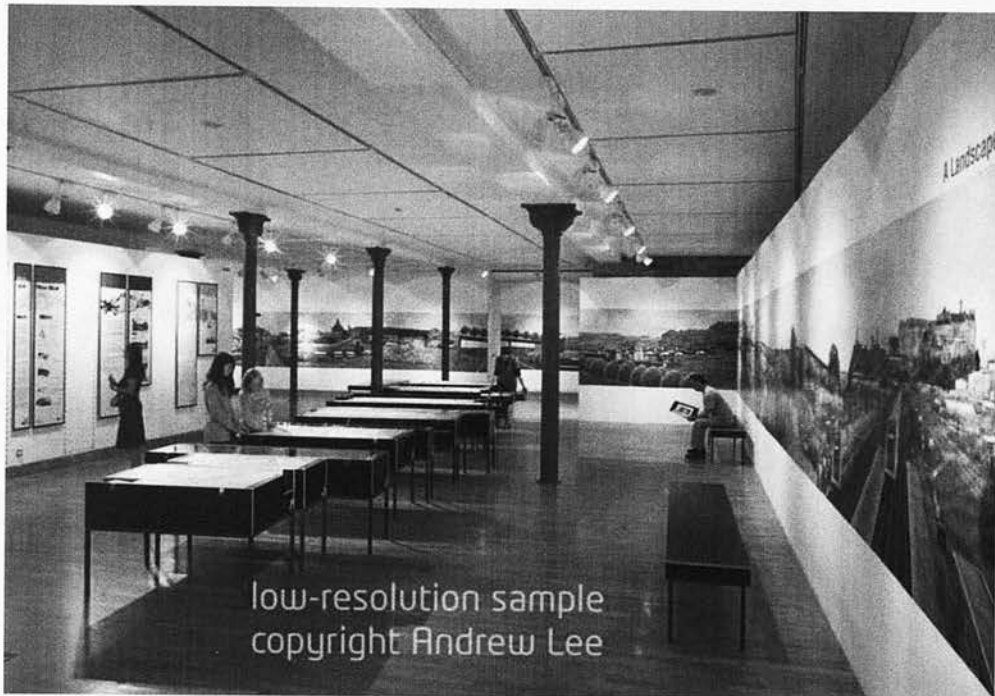


Figure 89: Shifts - View into the exhibition. Photo Andrew Lee.



Figure 90: Shifts - Exhibition visitors engaging with the SLOAP stamping device by garden.



Figure 91: Shifts - Exhibition visitors engaging with the cabinets by Cadell2.



Figure 92: Shifts - Cabinet drawer containing three video screens with project by GRAS.

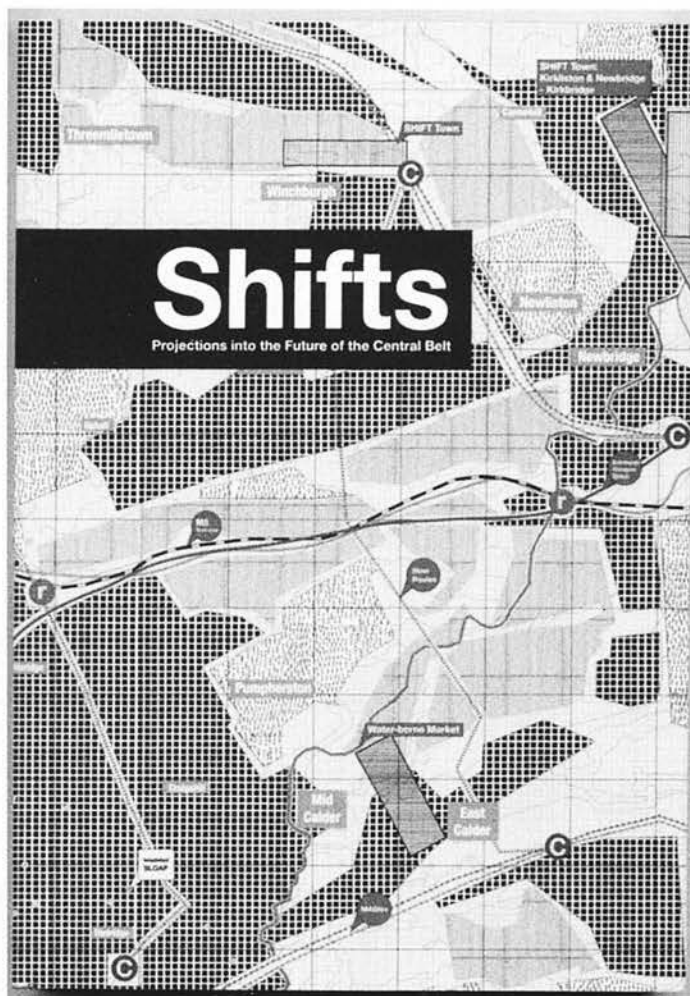


Figure 93: Shifts - Projections into the Future of the Central Belt, Cover.